Medical College of Georgia/Augusta

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general information

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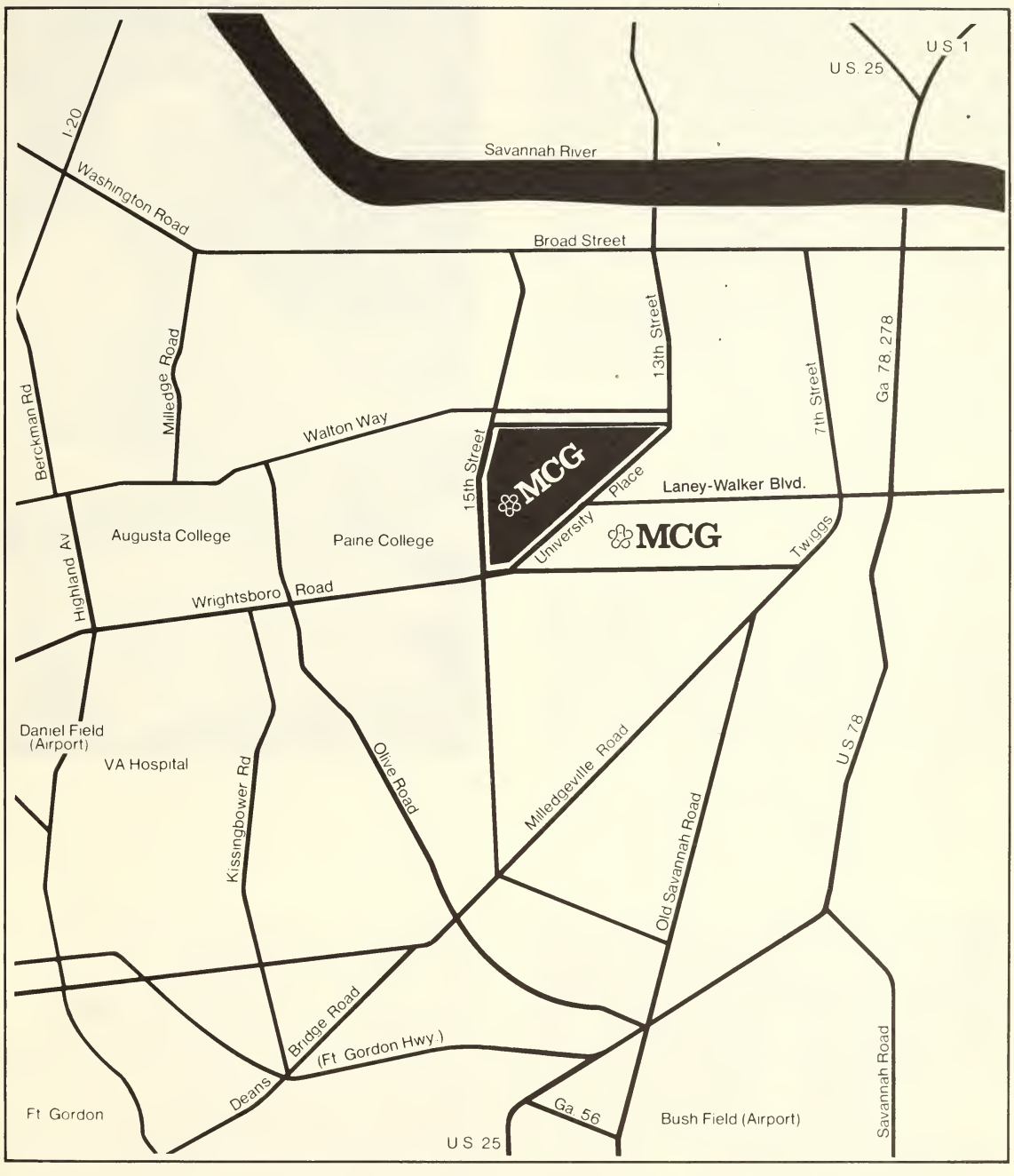
Patient care facilities are indicated in bold type.
* Facilities under construction

Augusta/Vicinity Map



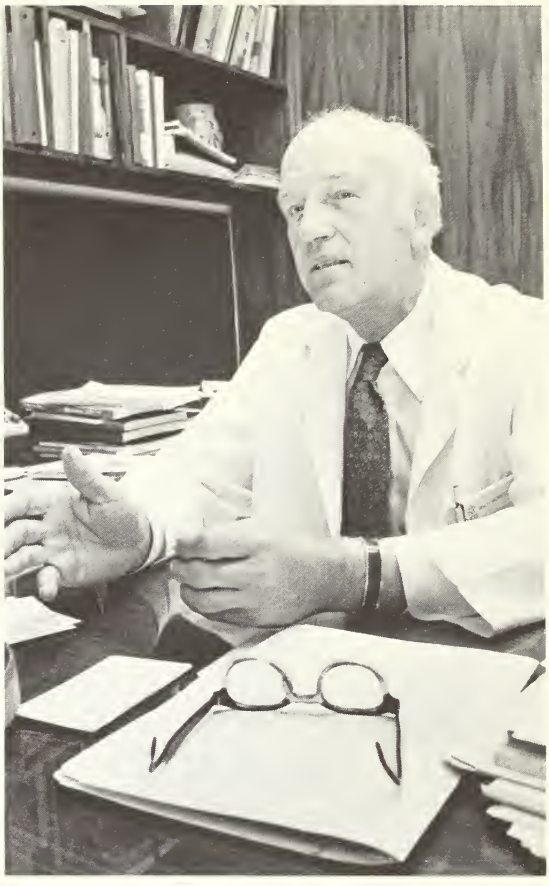
This edition of the Medical College of Georgia *Catalog* is intended to provide for you and for others interested in health education some essential information about Georgia's primary health sciences university. Designed for those already a part of our academic community as well as new and prospective students and faculty, the descriptive material will assist you in learning more about us—our character, heritage, objectives; our academic programs, distinguished faculty and our admissions and degree requirements and procedures to name just a few.

This *Catalog* also contains detailed descriptions of many of our courses of instruction and related information to assist those seeking a program that best meets their needs.

As you review this material, I hope you will better understand the importance and seriousness of our purpose here at the Medical College of Georgia; namely, to provide sound, comprehensive academic and clinical programs that will help our students become competent, qualified health professionals.

I have a great deal of personal pride in our institution and in our faculty and students. We shall continue to strive for a high degree of excellence in our educational programs, our research, and ultimately in our ability to provide better health care for all mankind. I invite you to join with us in this endeavor.

William H. Moretz, M.D.
President
Medical College of Georgia



Institutional Purposes

—To provide health education and training for prospective practitioners, scientists and educators at the undergraduate, graduate, postgraduate and continuing education levels.

—To promote scholarly inquiry in the biological sciences and provide leadership in the generation of basic knowledge of human biology in health and disease.

—To exercise leadership in the development of new educational approaches for the health professions and in the application of new knowledge and technology.

A History of the Medical College of Georgia

The Medical College of Georgia in Augusta is the eleventh oldest among existing medical schools in the United States. Founded in 1828, it is Georgia's primary institution of higher education for training health professionals.

The college has experienced rapid growth, particularly during the past quarter century. For example, in 25 years the campus physical plant has grown from just two buildings on little more than two acres of land to 47 buildings on approximately 78 acres of land today. And, construction or expansion of facilities planned over the next few years will continue that growth trend.

In 1950 there was one school—the School of Medicine, the core upon which the Medical College of Georgia was founded. Today, there are four additional schools—Graduate Studies, founded in 1951; Nursing, moved to Augusta from Athens in 1956; Allied Health Sciences, founded in 1968; and Dentistry, founded in 1969.

Another indicator of the college's growth is its student enrollment. This fall, the college expects to receive the largest enrollment in its history.

More than 4,500 faculty and staff personnel make the Medical College of Georgia Augusta's largest single employer.

The beginnings of this medical center were somewhat less impressive than the present modern campus. The college was started in two borrowed rooms at the rear of Augusta's old City Hospital 149 years ago, with its assets consisting of little more than the vision of its founders. It was in those early years that Drs. Milton Antony, Joseph Adams Eve, Lewis D. Ford, and later L.A. Dugas and Paul Eve, with the support of many Augusta citizens, began building the rich heritage that the Medical College now enjoys.

In 1833 members of the first graduating class received their doctor of medicine degrees. There were four students in that graduating class. In 1976 the college graduated approximately 160 physicians, 60 dentists, 415 undergraduate and 140 graduate nurses, 20 biomedical scientists and 175 professionals trained in fields of allied health science. Additionally, MCG now provides graduate education for more than 250 interns and residents each year.

Even in the early days of the Medical College, changes came quickly. In 1835 the college moved into its first permanent home at the corner of Telfair and Sixth streets in Augusta. This building, now called the Old Medical College and presently operated as a garden center, was vacated by the college in 1913, when the institution moved to its present mid-city campus consisting then of two buildings. Except for a brief interim during the Civil War, the Medical College has operated continuously since its founding.

From 1913 to 1950 the college experienced good times and bad. Faculty members as well as students were called to service in World Wars I and II. The college received varying accreditation ratings from the Council on Medical Education of the American Medical Association. There were fat years and there were lean years for State appropriations, and the depression did not spare the Medical College either. There were battles about the relocation of the college from Augusta to both Atlanta and Athens, and there were dynamic changes in curriculum. Also during this period, The *University System of Georgia* was established and the college celebrated its 100th anniversary.

In 1950 the Board of Regents of the University System made the Medical College an independent unit of the University System, and for the sixth time in 125 years the institution received a new name—Medical College of Georgia.

A vital adjunct to the Medical College's programs is its 600-bed teaching hospital, Talmadge Memorial Hospital, with the newly completed Virgil Sydenstricker Wing, and its various clinics. The founders of the college certainly could not have foreseen the rise of a great teaching hospital, as part of the MCG medical complex known today. Talmadge Memorial Hospital is the major referral center for the State; patients come to Augusta from throughout Georgia, and a dozen other states, because of Talmadge's rising reputation for the care of complex and difficult diseases. In 1976 for example, the hospital provided care for some 330 patients a day, and the college's medical and dental clinics recorded more than 200,000 outpatient visits during the year.

Neither could the founders have anticipated the honors and recognition that would mark the college's first century and a half of service to the cause of health care, health education and research on behalf of the people of Georgia. There was world-wide acclaim when Dr. Virgil Sydenstricker uncovered evidence that led to the conquest of pellagra. Dr. W.L. Moss, another MCG physician, was responsible for developing knowledge that led to the now familiar grouping of blood into three basic types. Still another Medical College of Georgia researcher, Dr. W.L. Hamilton, developed instruments and techniques which were vital forerunners of present-day open heart surgery.

Other research scientists in recent years have made important contributions to the world's knowledge of cancer, cardiovascular disease, sickle cell anemia; and scored advances in freezing and preserving human organs, in surgical techniques, and in the use of new materials in place of bone in dentistry.

MCG's rapid growth and expansion program of the late 1950's and on through the 1960's to today is an indication that the college is sincere about fulfilling its mandate from the people of Georgia to provide the highest quality educational programs and health care available.

The University System

The University System of Georgia was established in 1931 when control and operational authority over state-aided schools of higher learning were vested in the University System Board of Regents, a constitutional body appointed by the Governor and approved by the Senate. There are fifteen Regents, all serving terms of seven years. Members of the Board are appointed from each of the state's Congressional Districts and the remainder from the state-at-large. The Regents select their own officers and appoint a chancellor as chief administrator of the University System. The system consists of 33 institutions including the Medical College of Georgia.

Degrees Offered

The following degrees and certificates are granted by the college through its schools:

School of Medicine
The Doctor of Medicine degree.

School of Dentistry
The Doctor of Dental Medicine degree.

School of Graduate Studies
The Doctor of Philosophy degree.
The Master of Science degree.

School of Nursing
The Bachelor of Science in Nursing degree.
The Master of Science in Nursing degree.

School of Allied Health Sciences
Associated Dental Sciences:
- —Bachelor of Science degree in Dental Hygiene.
- —Associate of Science degree in Dental Hygiene.
- —Associate of Science degree in Dental Laboratory Technology.

Medical Illustration—Bachelor of Science degree.
Medical Record Administration—Bachelor of Science degree.
Medical Technology—Bachelor of Science degree.
Occupational Therapy—Bachelor of Science degree.
Physician's Assistants—Bachelor of Science degree.
Physical Therapy—Bachelor of Science degree.
Physical Therapist Assistant—Associate of Science degree.
Radiologic Technologies:
- —Bachelor of Science degree in Radiologic Technology.
- —Bachelor of Science degree in Nuclear Medicine Technology.
- —Associate of Science degree in Radiologic Technology.
- —Certificate in Nuclear Medicine Technology.
- —Certificate in Radiation Therapy Technology.

Respiratory Therapy—Bachelor of Science degree.

Joint Degrees
School of Graduate Studies—School of Medicine.
Doctor of Philosophy—Doctor of Medicine degree.
Master of Science—Doctor of Medicine degree.
School of Graduate Studies—School of Dentistry.
Master of Science in Oral Biology degree.
School of Graduate Studies—School of Allied Health Sciences.
Medical Illustration—Master of Science degree.
Master of Health Education degree.

Facilities For Instruction

The college campus, situated in the approximate center of Augusta, is convenient to the downtown business district. The locations of the college's various facilities are shown on the campus map located in the front of this *Catalog.*

Research and Education Building

The Sanders Research and Education Building, with the new William F. Hamilton wing, is a modern facility containing classrooms, basic science laboratories, faculty offices, one of the largest electron microscopy laboratories in the country, television services, and similar activities related to the instructional program. The Research and Education Building is the largest instructional building in the University System of Georgia, with about 350,000 square feet of floor space. The building is used primarily for research and instruction in the basic medical sciences.

Talmadge Memorial Hospital

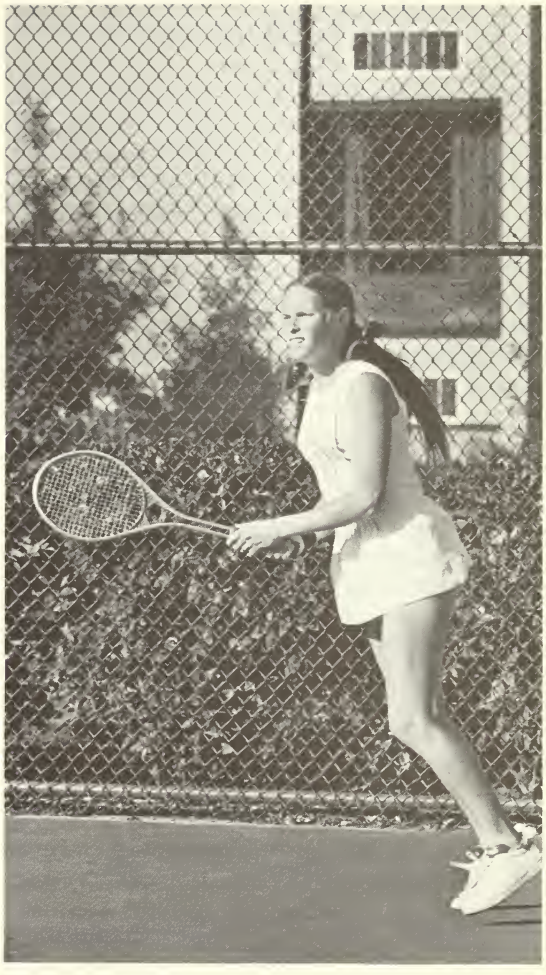
The hospital is an integral part of the Medical College, contributing teaching and clinical research facilities for both faculty and students. It contains approximately 600 beds with supporting x-ray, laboratory, physical medicine, surgery and dietary facilities.

The clinical, teaching and research facilities are utilized for the benefit of students in Medicine, Nursing, Medical Record Administration, Medical Technology, Medical Illustration, Physical Therapy, Occupational Therapy, Radiologic Technology, Physician Assistants and in the sciences basic to medicine and dentistry.

The new Sydenstricker addition to the Talmadge Hospital enlarged the teaching hospital for the Medical College of Georgia and made it the third largest hospital in Georgia. The older facility has 450,000 sq. ft. and the new wing added another 300,000. One-third of this is teaching space (faculty offices, classrooms, study labs and carrels) and the remaining two-thirds are for patient care. Many of the concepts of design and equipment provide students and patients with the most up-to-date environment for care and learning.

Outpatient Clinic Building

This modern three story facility, which is connected by a walkway with Talmadge Hospital,



provides space for seven clinic areas, an outpatient pharmacy, and various administrative offices. Located immediately adjacent to the clinic building is an office facility containing fifty faculty offices.

The School of Dentistry Building

This facility is one of the most modern and effectively designed buildings for dental education in the United States. The building contains operatories, laboratories, clinics, classrooms, seminar rooms and faculty offices geared toward the clinical education of dental students and research in clinical dentistry and the basic dental sciences.

Library

The Library is housed in a two-story building, completed in 1965. Each floor has open stacks and

reading areas. There are individual carrels, small-group study rooms and conference rooms.

Approximately 1,600 periodicals and other serials are received annually. The book and journal holdings consist of more than 100,000 volumes.

Audiovisual services and facilities are available, offering both audiovisual materials and equipment for use by students and faculty, with assistance in their selection and use.

Sophisticated computerized bibliographic search services, including MEDLINE, are offered. Interlibrary loan is offered through a quick teletype connection to other libraries in the Southeast.

Computational Facilities

Faculty and students have access to a variety of modern computer systems and services. The Division of Systems and Computer Services supports hospital and college information systems on an IBM 370/138, which is also used for research and education and supports instructional systems for student registration, test scoring and grade reporting. Interactive and batch terminals provide access through the University System of Georgia Computer Network to a CDC Cyber 70/74 and two IBM 370/158 computers at the University of Georgia. The division also operates a Hewlett-Packard 2000 Access time-sharing system for use by the School of Medicine for computer-based education. In addition, several minicomputers are located in various research laboratories on campus. Division staff provide a full range of consultative and support services for faculty and staff wishing to make use of these facilities.

The Georgia War Veteran's Nursing Home

The GWVNH is located adjacent to the main MCG campus and is administered under the auspices of the Medical College. The GWVNH is a facility of the Veterans' Service Board of Georgia, a State agency. The home contains 192 beds for nursing home care with some in-house medical services provided through the Medical College of Georgia.

Other Facilities

Other facilities for classroom, laboratory and/or clinical instruction are the Murphey Building, Dugas Building and the Educational Building Annex to Talmadge Hospital.

Administrative and service offices can be found in the School of Nursing building, Faculty Pavilion (administrative offices), the Administration building (offices for the president, provost, dean and associate deans of medicine, dean and associate dean of Allied Health Sciences, business affairs, registrar, academic admissions and institutional relations), the Student Center (Student Affairs offices, Student Government office, Book Store, cafeteria, snack bar, and recreational facilities) and Residences I, II, IV and V (student residences).

Additional clinics and offices are located in the Marks Building, the Perkins Building, the Endocrinology and Dermatology Building, the Protein Chemistry and Sickle Cell Center and the Children and Youth Project.

Major Affiliated Hospitals

The Medical College of Georgia has major affiliation agreements with the hospitals described below.

The Veterans Administration Hospital

The present Augusta VA hospital consists of two divisions—Forest Hills and Lenwood. These hospitals serve as excellent facilities for the clinical training of MCG students and house staff. Full-time faculty supervise patient care and student educational programs in both required and elective areas. The VA hospital is a member of the College Affiliated Hospitals Program.

A new VA hospital is presently under construction on property immediately adjacent to the main teaching hospital of the Medical College, Talmadge Memorial Hospital. A connecting walkway will enable easy access to this new, modern 420-bed hospital, expected to open in 1979.

University Hospital

This hospital, the Richmond County/Augusta community hospital, has a long tradition of medical education. It is a modern, 600-bed facility immediately adjacent to MCG and is currently utilized for clinical education of residents and MCG students in required clerkships and elective courses. As a member of the College Affiliated Hospitals Program, the University Hospital provides house staff training in several medical specialities. A nucleus of full-time faculty at University Hospital working with private physicians and Talmadge Hospital staff provides the supervision and teaching program.

Georgia Regional Hospital

Georgia Regional is a State regional psychiatric hospital designed to treat children and adolescents, adults and geriatric patients. The hospital also has

an alcohol and drug abuse unit. This modern, 300-bed hospital has affiliation with the MCG Medical School Psychiatry Department and the Schools of Allied Health Sciences and Nursing to provide clinical training for students and medical residents. Non-psychiatric health care of Georgia Regional patients is also provided by the Medical College of Georgia.

Dwight David Eisenhower Memorial Medical Center

Eisenhower Medical Center is located at Fort Gordon, Georgia on the outskirts of Augusta, and is the major referral hospital for all armed services in the Southeastern United States. This modern facility was opened in 1976 and, when fully equipped, will have 760 beds. MCG students in medicine, dentistry, allied health sciences and nursing, under the direction of MCG faculty, utilize the clinical facilities of Eisenhower Medical Center for various educational programs.

Gracewood State School and Hospital

Gracewood is the State school and hospital for the mentally retarded, and is dedicated to nurturing the dignity, health and development of the mentally retarded who require residential care. The facility serves all age levels and provides broad services for care, treatment and training. The residential units accomodate an optimum of 1,000 residents. Students in medicine, dentistry and allied health sciences receive clinical training and/or provide care at Gracewood under the direction of resident faculty.

Other Major Affiliated Hospitals

The Medical College of Georgia maintains full-time faculty stationed in four hospitals in three of the larger cities of Georgia. These hospitals provide clinic training to medical students and expose the students to health care facilities, patients, problems and related experiences in these community hospitals which are remote from Augusta. Each participating hospital has had on-going programs in graduate level residencies and is committed to providing an educational program of quality.

The participating hospitals are:

—The Medical Center of Central Georgia in Macon
—The Memorial Medical Center in Savannah
—The Medical Center in Columbus
—St. Francis Hospital in Columbus

These and other hospitals throughout Georgia and other states have formal affiliation with various programs in the Schools of Allied Health Sciences and Nursing.

Admission Requirements

Admission requirements and application procedures, including information pertaining to application forms, physical examinations, personal interviews and pre-entrance testing, are listed within each school's section of this *Catalog*.

The college is an affirmative action/equal opportunity educational institution in that no person shall, on the grounds of sex, race, color, creed, or national origin, or handicap be excluded from participation in, or be otherwise subjected to discrimination in any educational program, activity, or facility.

Transfer Credit

A maximum of 95 academic quarter hours from a junior college, or 145 hours from a senior college or other educational institution may be transferred into an undergraduate program. See the "Scholarship" statement under Graduation Requirements.

Courses and credits transferable to an undergraduate curriculum from other colleges or universities must have an over-all grade average acceptable to the college, but in no case less than a 2.00. College credit will not be allowed for remedial courses or other such courses that are basically of secondary school level. Individual schools/programs may have higher standards for transfer credit, in which case the higher standards shall apply.

At the discretion of the appropriate academic dean, a student transferring into professional curricula from any institution may be required to have professional course work validated by standardized examinations in order to gain advanced standing and receive college credit for such course work. An application will not be considered from a student who is not in good standing at the institution he has attended previously, unless officials at the last institution attended recommend consideration of the application.

An applicant who wishes to transfer to the college must submit official transcripts of all course work attempted at every institution of higher education at which he has ever enrolled. Such transcripts must be sent by the registrar at each previously attended institution, and in accordance with instructions sent the applicant with application materials. Transcripts sent by the applicant or transcripts without an official seal and registrar's signature, will not be accepted.

The total number of hours that may be earned toward a degree by either extension or correspondence courses, or both, shall not exceed

one-fourth of the total credit hours required for a degree. Credit from correspondence courses and/or extension courses are subject to validation to the satisfaction of the dean of the school concerned.

Any credit which is more than ten years old is subject to validation to the satisfaction of the dean of the school concerned. Credits from unaccredited institutions are subject to validation to the satisfaction of the dean of the school concerned.

College-Level Examination Program (CLEP)

The Medical College of Georgia may award credit to students who successfully pass this test in applicable academic fields, in accordance with the CLEP policy available in the registrar's office.

Transient Students

Students in good standing at other accredited institutions may apply to attend MCG for one quarter in order to complete work to be transferred back to the parent institution, subject to the following stipulations:

1. Before an application can be filed, the applicant must obtain written approval from the school and department at the Medical College offering the desired course(s), and/or approval of the faculty member(s) teaching the course(s), depending upon the individual school's policy on such matters.
2. Following the obtaining of the above written permission, the applicant must meet all MCG and Board of Regents requirements for transient students.

The policy does not apply to the Schools of Medicine and Dentistry.

General Education Courses For Undergraduate Students

The Medical College of Georgia is a state-supported unit of the University System of Georgia. Augusta College has been designated to assume the responsibility for offering selected courses in general education for all students registered at the Medical College of Georgia. Credits and grades for such courses are accepted by the college directly from Augusta College as though the courses were taught on the MCG campus. The student must be registered at MCG while taking the courses.

Academic Regulations

Units of Credit

The unit of credit is the quarter hour. A quarter hour equals one hour of class work per week for one quarter, or its equivalent in other forms of instruction. Credit given for particular courses is as stated in the course listings of this *Catalog*, or as defined at the time of registration by the various schools.

Course Numbering System

The college offers courses numbered 100 to 299 to students in the lower division of undergraduate schools, and courses numbered 300 to 499 to students in the upper division of undergraduate schools. Graduate courses are numbered from 600 to 999. Certain courses are offered to undergraduate, graduate and professional students jointly. Such courses are numbered appropriately for each class and degree program.

Courses in the Schools of Medicine and Dentistry are numbered from 500 to 599.

Developmental and remedial courses, which do not carry academic credit, have course numbers of 099 and below.

Classification of Students

The classification under which a student registers at the beginning of each academic quarter will continue throughout the academic quarter.

Undergraduate students are classified as follows:

CLASSIFICATION	HOURS EARNED
Freshman	less than 45
Sophomore	at least 45
Junior	at least 90
Senior	at least 135

Grades

The Medical College of Georgia is on the 4.0 grade point average system. The following grades are approved for use in the Medical College of Georgia and are included in the determination of the grade point average:

Grade	Description	Grade Points
A	excellent	4.0
B	good	3.0
C	satisfactory	2.0
D	passing*	1.0
F	failure	0.0
WF	withdrew, failing	0.0

The following symbols are approved for use in the cases indicated, but will not be included in the determination of the grade point average.

I—This symbol indicates that a student was doing satisfactory work but, for non-academic reasons beyond his control, was unable to meet the full requirements of the course. The requirements for removal of an "I" are left to the respective schools; however, if an "I" is not satisfactorily removed after three quarters of residence, the symbol "I" will be changed to the grade "F" by the registrar.

W—This symbol indicates that a student was permitted to withdraw without penalty. Withdrawals without penalty will not be permitted after the mid-point of the total grading period (including final examinations) except in cases of hardships as determined by the appropriate academic dean.

S**—This symbol indicates that credit has been given for completion of degree requirements other than academic course work. The use of this symbol is approved only for dissertation and thesis hours, student teaching, clinical practicum, internship, and proficiency requirements in graduate programs.

U**—This symbol indicates unsatisfactory performance in an attempt to complete degree requirements other than academic course work. The use of this symbol is approved only for dissertation and thesis hours, student teaching, clinical practicum, internship and proficiency requirements in graduate programs.

V—This symbol indicates that a student was given permission to audit this course. Students may not transfer from audit to credit status or vice versa.

K—This symbol indicates that a student was given credit for the course via a credit by examination program approved by the respective school's faculty. (CLEP, AP, Proficiency, etc.)

*Some curricula do not recognize the D as acceptable for meeting graduation requirements. See School/Program sections for these higher requirements.

**Use of this symbol to grade regular academic course work must have the prior permission of the president and chancellor.

Grade Changes

Any grade changes due to errors in reporting must be brought to the attention of the registrar's office within three months of the time reported.

Repeated Course Work

By registering for a course for which credit has already been received, a student forfeits credit toward graduation in the previous course. The final grade will be the grade on the repeated course; however, all hours attempted and grades earned will appear on the transcript and be used in computing the grade point average.

Registration

Registration must be completed on the dates stated in the academic calendar. Registration procedures are the responsibility of the registrar. Notification of these procedures will be sent to all students at the appropriate time.

Adding and Dropping Courses

Additions to a student's course schedule will not be allowed after the deadline for adding courses set forth in the academic calendar.

A course may be dropped without penalty up to the midterm date set forth in the academic calendar. Following this deadline, a student dropping a course will receive a WF (Withdrew Failing), except in cases of hardship as determined

by the appropriate academic dean. WF grades will be treated as F grades for grade point calculations.

Courses may only be added or dropped by following procedures established by the registrar.

Late Registration Policy

1. Any student failing to register by the last date of regular registration for his/her school or program, to include payment of fees, shall be permitted to register during the time designated for late registration. However, a late fee of $25.00 shall be assessed for any student registering during the late registration period.
2. In keeping with Board of Regents policy, registration fees are due and payable at the time of registration. The student cannot be enrolled until all registration and other fees are paid in full.
3. No student shall be permitted to register after the last date of late registration, except in cases of unusual circumstances as judged by the president of the Medical College of Georgia. In such cases, the student shall be required to pay the late registration fee in addition to the regular registration fees.

Auditors

Regularly enrolled Medical College students may register for courses as auditors. No academic credit shall be awarded to students enrolled on this basis. After the last day for registration, no changes from an audit basis to credit or from credit to audit will be permitted. Students auditing courses will be required to pay the regular fees for enrollment. (See the "Fees" section of this *Catalog.*)

Attendance

Regular and punctual attendance is expected of students in all classes, and is counted from the first class meeting each term. Students who incur an excessive number of absences are subject to academic penalty.

Specific attendance requirements may be established by individual schools/programs.

Normal Course Load

The normal course load may vary with the degree program. Students may be required to register for a course load less than the normal course load if this action is determined to be advisable in the light of the student's academic standing or for other reasons. An undergraduate or graduate studies student who in any quarter registers for less than 12 quarter hours is considered a part-time student; a student who registers for 12 or more hours is considered a full-time student. No student of the Schools of Allied Health Science, Graduate Studies or Nursing may register without special approval from his/her dean for more than 20 quarter hours (including audit courses) in any given academic quarter.

Planning the Academic Program

The academic program of each student should be planned in consultation with the academic advisor, major professor, or other person as designated by the dean of the school concerned.

Withdrawal from the College

A student who wishes to withdraw must report to the registrar to obtain and complete withdrawal procedures outlined in the Withdrawal Form. The official records of a student who fails to withdraw officially from this institution will not be released until the appropriate withdrawal procedures have been completed.

Non-Continuous Matriculation

Normally a student may be permitted to graduate under academic provisions of the *Catalog* in effect at the time of his/her first matriculation. A student who returns to one of the undergraduate programs, graduate nursing or to the School of Graduate Studies, after an absence of two or more years will be required to meet the degree provisions of the *Catalog* current on his/her return, along with such other regulations as may be in effect at the time.

Examinations

A student may be required to perform acceptably on any examination before graduation as deemed appropriate by the academic deans, president, and/or Board of Regents.

Academic Probation and Suspension

The following policy applies to all undergraduate programs. Policies for graduate level programs are stated under the appropriate school section of this *Catalog.*

Academic Probation: Any undergraduate student whose grade point average (GPA) for any quarter is below 2.0 (on a 4.0 scale) or whose cumulative MCG GPA is below 2.0 at the end of any quarter shall be considered on academic probation (subject to the provisions of the following suspension policy.)

Academic Suspension: Any undergraduate student shall be suspended whenever he/she:

1. Fails to make a passing grade in at least one academic course in any quarter;

2. Fails to achieve and maintain at least a 1.80 cumulative GPA for all resident work after 45 hours and a 2.0 for all resident work at the end of any academic year thereafter.
3. Fails to achieve a quarterly GPA of at least 2.0 in the quarter immediately following his/her placement on probation.

Individual school/department policy may be established which dictates that an undergraduate student who fails to make a "C" in any course which is essential to further study in the curriculum of the program in which he/she enrolled may be suspended.

Where circumstances warrant, an undergraduate student suspended under the provisions of this policy may be reinstated as a student on probation upon the written authorization of the dean and subject to conditions of continuation established by the dean at the time of reinstatement.

Any undergraduate student suspended for academic reasons and seeking to be readmitted may reapply for the next appropriate admission date following standard admission procedures.

Curriculum Changes

The new knowledge continually emerging in the health sciences, changing concepts in the delivery of health care and consideration of certification and licensure requirements may necessitate certain changes in the curriculum of a given school. However, when such changes are anticipated or made after careful review and evaluation, full consideration will have been given to the impact these changes might have on the student's overall academic program during his or her period of matriculation. Consideration will also be given to the impact of any changes on the faculty and the institution as a whole.

Changes in Catalog Requirements

The statements set forth in this *Catalog* are for informational purposes only and should not be construed as the basis of a contract between a student and this institution.

While the provisions of this *Catalog* will ordinarily be applied as stated, the Medical College of Georgia reserves the right to change any provision listed in this *Catalog,* including but not limited to academic requirements for graduation, without actual notice to individual students. Every effort will be made to keep students advised of any such changes. Information on changes will be available in the offices of the president, provost, academic deans, registrar, and student affairs. It is especially important that students note that it is their responsibility to keep themselves apprised of current graduation requirements for their particular degree program.

Requirements for Graduation

Requirements for Graduate, Medical and Dental Degrees

Requirements for graduate, medical and dental degrees are stated in this *Catalog* under the sections for the School of Medicine, School of Dentistry, School of Graduate Studies, and the School of Nursing.

Requirements for Associate and Baccalaureate Degrees

Requirements in addition to those listed below for associate and baccalaureate degrees are stated in this *Catalog* under the sections for the School of Allied Health Sciences and the School of Nursing.

1. **Recommendation by Faculty**
   It is implicit in the requirements for all degrees conferred by the college that the faculty of each school recommend each candidate for a degree as having met all requirements for the degree to be conferred.
2. **Residence Requirements**
   Every candidate for a baccalaureate or associate degree at the Medical College of Georgia must take a minimum of 45 quarter hours in residence.
3. **Total Credit Requirements**
   A minimum of 180 quarter hours (excluding physical education) is required for a baccalaureate degree, and a minimum of 90 quarter hours (excluding physical education) is required for an associate degree.
4. **Regents Testing Program Examination (Rising Junior Test) Requirement**
   The University System of Georgia requires that each student receiving an undergraduate degree from a state-supported college must have successfully completed all parts at one administration of a competency examination in reading, writing and English composition. This examination is a requirement during the academic quarter following the completion of 60 quarter credit hours. The Rising Junior Test of the University System of Georgia is administered at the Medical College once during each quarter. Students will be notified of the dates

on which the Rising Junior Test will be administered.

It is the responsibility of the institution to prescribe a program of remedial instruction for the student who does not successfully complete the Rising Junior Test. It is the responsibility of each student who does not successfully complete the examination to complete the remedial program prescribed by the college in order to be permitted to retake the examination at a later date.

An undergraduate degree program student transferring 60 or more quarter hours from another institution who has not successfully completed the Rising Junior Test will be required to take the examination during his/her first quarter of attendance at the Medical College of Georgia.

5. **Examinations on the History and Constitutions of the United States and Georgia**
   Examinations on these subjects are required of all baccalaureate and associate degree students unless exempted by presentation of course credit dealing with these constitutions and histories. The examination will be given once each quarter. A student is advised to meet this requirement early in his/her academic career.

6. **Scholarship**
   An undergraduate degree shall not be conferred on any person whose overall grade point average (for courses in residence) is less than 2.0. Credit hours in courses with the grade of D shall not exceed 20 percent of the total hours for any degree program. Individual curricula may establish higher standards for achievement, in which case, the higher standards shall apply.
7. **Consultation with Dean or Chairman**
   The candidate for an undergraduate degree must consult with the office of the registrar and the dean or chairman of his/her program concerning completion of requirements for graduation. This consultation should be done three quarters before the expected date of graduation.

Application for Graduation

Application for graduation must be made by each candidate on a form obtainable from the office of the registrar. The application form should be completed at least two quarters prior to time of graduation. The candidate for a degree from the college must attend the commencement exercise at which the degree is to be conferred, unless he/she is officially excused in writing by the appropriate academic dean.

Food Services

The college provides a cafeteria and coffee shop in the Student Center and in Talmadge Memorial Hospital.

Housing

The Medical College has limited residence hall and apartment accommodations on the campus for single undergraduates, single graduates and professional students and married students. All accommodations are air conditioned. Rent includes all utilities.

Residences I & II
Single Room $210.00 per quarter
Double Room $140.00 per quarter

Residence IV (Single Graduate, Medical, and Dental Students)
Double Room $180.00 per quarter

Residence V (Furnished Married Student Apartments)

One Bedroom $150.00 per month
Two Bedroom $165.00 per month

Deposits and Refunds

A security deposit is required of all students given a housing assignment. This deposit is retained by the college to cover the cost of any damage to rented facilities. The deposit will be refunded less any deductions if the student meets the provisions of the current rental agreement. The refund of the security deposit will be made as soon as possible after terminating housing.

Application Procedures and Information

Students accepted for admission to the college and interested in applying for housing should write the Housing Office, Residence II, Medical College of Georgia, Augusta, Georgia 30901.

Off-Campus Housing

Accepted students interested in housing off-campus should visit the off-campus housing office in Residence I for information about housing in the Augusta community.

Fees

Costs of housing, materials, books, deposits, food, uniforms, instruments, and personal expenses are estimated in each school's section of the *Catalog*.

Full-Time Graduate and Undergraduate Students

The following general fees are payable at the time of registration for all graduate and undergraduate full-time (12 credit hours or more) regularly enrolled students:

	per quarter
Matriculation Fee	$185.00
Non-resident Fee (in addition to Matriculation Fee)	317.00
Student Health Fee	10.00
Student Activities Fee	10.00

Part-Time Graduate and Undergraduate Students

The following general fees are payable at the time of registration for all graduate and undergraduate part-time (less than 12 credit hours) regularly enrolled students:

	per quarter hour
Matriculation Fee	$ 15.00
Non-resident Fee (in addition to Matriculation Fee)	26.00
Student Health Fee (only if enrolling for 6 hours or more)	10.00
Student Activities Fee (only if enrolling for 6 hours or more)	10.00

Full-Time Medical and Dental Students

The following general fees are payable at the time of registration for all full-time regularly enrolled Medical and Dental students:

	per quarter
Matriculation Fee	$385.00
Non-resident Fee (in addition to Matriculation Fee)	385.00
Student Health Fee	10.00
Student Activities Fee	10.00

Part-Time Medical and Dental Students

Medical and dental students enrolled for a part-time course load shall pay fees at the time of registration each quarter in accordance with a fee schedule available in the registrar's office and comptroller's office.

Audit Fees

Fees for auditing a course are the same as the fees for regular enrollment. (See the Academic Regulations section for policy regulating course audits.)

Acceptance Deposits

All schools of the Medical College of Georgia require a $50.00 acceptance deposit which will be credited toward first quarter matriculation fees. Those accepted applicants who fail to appear for registration, and fail to notify the appropriate admissions office of their withdrawal in writing not later than the last day of regular registration of their entering class, shall forfeit their acceptance deposit.

Refund of Fees

Students who withdraw from college will receive a refund of matriculation fees at the end of the quarter in which the withdrawal is made. Students who officially withdraw with a clean record within the time specified after the sched-

uled first day of classes may receive refunds of matriculation fees as listed:

Time of Withdrawal	Percent Refunded
Not more than one week	80
Not more than two weeks	60
Not more than three weeks	40
Not more than four weeks	20
More than four weeks	0

Student health and student activity fees will not be refunded when withdrawing. The refund of matriculation fees is limited to withdrawal from the institution and not for dropping of individual courses.

Changes in Fees and Other Charges

All matriculation charges, board, room rent or other charges listed in this *Catalog* are subject to change at the end of any quarter.

Discipline and Appeals

Student discipline at the college is the responsibility of the president and his administrative staff. Students will be expected to act in a manner of credit to themselves and to the institution as outlined in the *Student Handbook* section on "Student Judiciary Procedures."

Appeals Procedure

When an applicant for admission shall feel that his application has not been given due consideration or when a student shall be expelled or suspended, the applicant or student shall have the right to appeal in accordance with the following procedure:

He shall appeal in writing to the president of the institution within five days after the action of which he complains. The president shall appoint a committee to review all facts and circumstances and shall within fifteen days make a decision which shall be final so far as the institution is concerned.

Should the aggrieved person be dissatisfied with this decision, he shall have the right to appeal in writing to the Board of Regents. An appeal to the Board of Regents shall be submitted in writing to the executive secretary of the Board within ten days after the president's decision and shall recite all reasons for dissatisfaction with the previous decision. After thorough investigation, the Board shall make its decision within 60 days. The Board's decision shall be final and binding for all purposes.

Financial Assistance for Students

Because the cost of acquiring an education in the health sciences may prevent many students from beginning or completing their studies, the college has developed a program to assist students in financing their education. The college believes that educational opportunities for qualified students should not be controlled by their financial resources, although realistic financial planning is an essential part of college preparation. In selecting students to receive financial assistance the college places primary emphasis on financial need. Academic achievement and promise, and character are also considered.

Students desiring more information about financial aid resources should write the Financial Aid Office, Medical College of Georgia, Augusta, Georgia 30901. Information concerning graduate fellowships and assistantships is available from the School of Graduate Studies. Applications for assistance may be submitted to the college prior to official acceptance for enrollment and should be on file by May 1. Later applications will be considered only on a "remaining funds available" basis.

Student Health Service

Full information on student health service is published in a *Student Handbook* which all students receive upon entrance into the college. The cost of the health service is $10 per quarter to all students enrolled for six or more credit hours.

Student Life Insurance

All full-time students of the college may participate in the group life insurance plan which currently is underwritten by the Equitable Life Assurance Society of the United States. The benefit schedule and cost is given to each student at the beginning of each year. The current cost, which is subject to change, is as follows:

Life and Accidental Death and Dismemberment Insurance:

Life Insurance $3,000
Accidental Death and Dismemberment Insurance $3,000

Present cost is 57 cents per month or $6.84 per year.

An enrollment form must be completed and annual fees paid for insurance to be effective! Insurance continues in effect as long as annual fees are paid in advance.

Student Hospitalization Insurance

The student health insurance currently is underwritten by World Service Life Insurance Company, Forth Worth, Texas and serviced and admistered by Collins Insurance Agency, Roswell, Georgia.

Details of coverage and cost are available from an agent who will be on campus at the beginning of each quarter or from the following address: Collins Insurance Agency, 11120 Crosshaven Drive, Roswell, Georgia 30075.

Student Responsibilities and Services

The services available to students, as well as the students' responsibilities are outlined in the *Student Handbook* which is published by the Division of Student Affairs. All students are responsible for knowing its content. Copies are available from the Division of Student Affairs.

Rules Governing the Classification of Students as Residents and Non-residents

1. (a) If a person is 18 years of age or older, he or she may register as a resident student only upon showing that he or she has been a legal resident of Georgia for a period of at least twelve months immediately preceding the date of registration.
   (b) No emancipated minor or person 18 years of age or older shall be deemed to have gained or acquired in-state residence status for fee purposes while attending any educational institution in this state, in the absence of a clear demonstration that he or she has in fact established legal residence in this state.
2. If a person is under 18 years of age, he or she may register as a resident student only upon showing that his or her supporting parent or guardian has been a legal resident of Georgia for a period of at least twelve months immediately preceding the date of registration.
3. A full-time employee of the University System and his or her spouse and dependent children may register on the payment of resident fees.
4. Non-resident graduate students who hold teaching or research assistantships requiring at least one-third time service may register as students in the institution in which they are employed on payment of resident fees.
5. Full-time teachers in the public schools of Georgia and their dependent children may enroll as students in the University System institutions on the payment of resident fees, when such teachers have been legal residents of Georgia for the immediately preceding nine months, were engaged in teaching during such nine month period, and have been employed to teach full-time in the public schools of Georgia during the ensuing school year.
6. All aliens shall be classified as non-resident students; provided, however, that an alien who is living in this country under a visa permitting permanent residence shall have the same privilege of qualifying for resident status for fee purposes as a citizen of the United States.
7. Foreign students who attend institutions of the University System under financial sponsorship of civic or religious groups located in this state, may be enrolled upon the payment of resident fees, provided the number of such foreign students in any one institution does not exceed the quota approved by the Board of Regents for that institution.
8. If the parents or legal guardian of a minor change his or her legal residence to another state following a period of legal residence in Georgia, the minor may continue to take courses for a period of twelve consecutive months on the payment of resident fees. After the expiration of the twelve month period the student may continue his registration only upon the payment of fees at the non-resident rate.
9. In the event that a legal resident of Georgia is appointed as guardian of a non-resident minor, such minor will not be permitted to register as a resident student until the expiration of one year from the date of court appointment, and then only upon proper showing that such appointment was not made to avoid payment of the non-resident fees.
10. Career Consular Officers and their dependents who are citizens of the foreign nation which their consular office represents, and who are stationed and living in Georgia under orders of their respective governments, shall be entitled to enroll in University System institutions on payment of resident fees. This arrangement shall apply to those consular officers whose nations operate on the principle of educational reciprocity with the United States.
11. Military personnel, and their dependents, stationed in Georgia and on active duty will

not be assessed a non-resident fee but shall pay the same fees assessed residents of Georgia, effective beginning Summer Quarter, 1977.

Illegal use, possession, or distribution of narcotics and/or other dangerous drugs.

The following statement of policy is designed to emphasize, in fairness to all members of the college community, the serious and dangerous consequences resulting from the illegal use, possession or distribution of marijuana, lysergic acid diethylamide (LSD), or other mind-altering drugs, and the unauthorized use of drugs, such as amphetamines, barbiturates and tranquilizers, which are sometimes prescribed for medical purposes.

While there is admittedly much controversy as to whether or not marijuana should be classified as a narcotic or dangerous drug, the fact remains that the possession or transfer (including gifts) of marijuana and LSD is illegal under both federal and state laws and is punishable under either.

It should be especially noted that "any person who, by himself, agent or through any other person, gives, sells, offers for sale, barters, or exchanges with any person any narcotic in violation of the provisions of said Chapter (79A-8, of the Uniform Drug Act) shall be guilty of a felony and upon the first conviction thereof shall be punished by imprisonment in the penitentiary for not less than one nor more than 30 years." The penalty for subsequent offenses is a felony punishable by imprisonment for a period of not less than one and nor more than 30 years with possible life sentence at the discretion of the judge.

Agents of the federal and state governments are engaged in intensive and thorough investigation on a continuing basis throughout the state. The law requires that when a felony is committed the civil authorities shall handle the situation rather than college authorities. Technically the law would say that failure to do so would involve compounding a felony.

Under such circumstances it is clear that the policy of the college must be: "Students involved in civil and criminal offenses will be treated as citizens of the community."

Clearly, the college cannot protect members of its community who commit such offenses. In "Student Freedoms and Responsibilities: A Working Paper," published by the American Association of State Colleges and Universities, it is pointed out that "Students should not expect that university officials will come to their defense for activities committed in violation of civil codes." It ought to be added that this applies to *all* members of the college community.

It should not be inferred from this that the college is indifferent about what happens to members of its community; rather, it has a deep concern for those who may find themselves in violation of the law. It is believed that some may not fully recognize the implications of full accountability and responsibility with regard to drugs, and it is for this reason that this statement is being made.

Cultural and Social Activities

Augusta offers a wide spectrum of cultural, social and recreational activities. Located near the Clark Hill Reservoir, the area offers many facilities for swimming, camping, boating and other outdoor recreational activities. Augusta is known as the "Winter Golf Capital of the World" because of the annual international Masters Golf Tournament. In addition Augusta is located near Aiken, South Carolina, which has become a center for polo and other equestrian sports. Cultural highlights are provided by the Augusta Symphony, the Augusta Opera Association, Inc., the Augusta Players and numerous other organizations interested in presenting opportunities for artistic expression. Films, speakers and special events also are often sponsored by both Paine College and Augusta College.

The Medical College of Georgia Student Council sponsors a full calendar of activities as well as providing tennis courts, a putting green and indoor recreation (pool tables, ping pong, weight room, sauna, pottery room, dark room, etc.).

Academic Calendars

School of Allied Health Sciences and School of Nursing Calendar

	Academic Year 1977-78	Academic Year 1978-79
Fall Quarter		
Orientation for new students	Sept. 12	Sept. 11
Registration for new students	Sept. 13	Sept. 12
Registration for returning students	Sept. 14	Sept. 13
Exemption Examinations given at MCG for U.S. and Georgia History and Constitution	Sept. 15	Sept. 14
Classes begin	Sept. 19	Sept. 18
Last day for late registration and class changes	Sept. 22	Sept. 21
Rising Junior Exam	(to be announced)	
Midterm: Last day to withdraw from a course without penalty	Oct. 24	Oct. 23
Last day to apply for March graduation	Oct. 24	Oct. 23
Preregistration for Winter Quarter	Oct. 31-Nov. 3	Oct. 30-Nov. 2
Thanksgiving recess	Nov. 24-27	Nov. 23-26
Last day of classes	Dec. 2	Dec. 1
Examinations	Dec. 3, 5-8	Dec. 2, 4-7
Term ends	Dec. 8	Dec. 7
Winter Quarter		
Registration	Jan. 3	Jan. 2
Exemption Examinations given at MCG for U.S. and Georgia History and Constitution	Jan. 3	Jan. 2
Classes begin	Jan. 4	Jan. 3
Last day for late registration and class changes	Jan. 9	Jan. 9
Rising Junior Exam	(to be announced)	
Midterm: Last day to withdraw from a course without penalty	Feb. 7	Feb. 6
Last day to apply for June graduation	Feb. 7	Feb. 6
Preregistration for Spring Quarter	Feb. 13-16	Feb. 12-15
Last day of classes	March 14	March 12
Examinations	March 15-18, 20-21	March 13-17
Term ends	March 21	March 17
Spring Quarter		
Registration	March 27	March 26
Exemption Examinations given at MCG for U.S. and Georgia History and Constitution	March 27	March 26
Classes begin	March 28	March 27
Last day for late registration and class changes	March 31	April 2
Rising Junior Exam	(to be announced)	
Midterm: Last day to withdraw from a course without penalty	April 28	April 30
Last day to apply for August graduation	April 28	April 30
Preregistration for Summer and Fall Quarter	May 1-4	April 23-26
Last day of classes	June 2	June 1
Examinations	June 3, 5-7	June 2, 4-6
Term ends	June 7	June 6
Graduation	June 10	June 9

School of Allied Health Sciences and School of Nursing Calendar (Cont.)

Summer Quarter	Academic Year 1977-78	Academic Year 1978-79
Orientation for new students	June 13	June 12
Registration	June 14	June 13
Exemption Examinations given at MCG for U.S. and Georgia History and Constitution	June 14	June 13
Classes begin	June 15	June 14
Last day for late registration and class changes	June 20	June 20
Independence Day recess	July 3-4	July 4
Preregistration for Fall Quarter	July 10-13	July 16-19
Rising Junior Exam	(to be announced)	
Midterm: Last day to withdraw from a course without penalty	July 21	July 19
Last day to apply for December graduation	July 21	July 19
Last day of classes	Aug. 25	Aug. 23
Examinations	Aug. 26, 28-30	Aug. 24-25, 27
Term ends	Aug. 30	Aug. 27
Graduation	Sept. 30	Aug. 30

School of Dentistry Calendar

Fall Quarter, 1977	Four Year Curriculum	Three Year Curriculum
Classes begin	Sept. 26	Oct. 3
Exams	Dec. 12-16	—
Quarter ends	Dec. 16	Dec. 16
Winter Quarter, 1978		
Classes begin	Jan. 9	Jan. 9
Exams	March 27-31	—
Quarter ends	March 31	March 24
Spring Quarter, 1978		
Classes begin	April 10	March 27
Spring recess	—	April 1-9
Exams	June 26-30	—
Quarter ends	June 30	June 16
Summer Quarter, 1978		
Classes begin	—	June 19
Activity Session begins	July 31	—
Activity Session ends	Sept. 23	—
Quarter ends	—	Sept. 29
Graduation	—	Sept. 30
Fall Quarter, 1978		
Classes begin	Sept. 28	—
Exams	Dec. 18-22	—
Quarter ends	Dec. 22	—
Winter Quarter, 1979		
Classes begin	Jan. 8	—
Exams	March 26-30	—
Quarter ends	March 30	—
Spring Quarter, 1979		
Classes begin	April 9	—
Exams	June 25-29	—
Quarter ends	June 29	—

School of Graduate Studies Calendar

	Academic Year 1977-78	Academic Year 1978-79
Fall Quarter		
Advisement and registration	Sept. 9	Sept. 8
Classes begin	Sept. 12	Sept. 11
Last day for late registration and class changes	Sept. 22	Sept. 21
Midterm: Last day to withdraw from a course without penalty	Oct. 24	Oct. 23
Preregistration for Winter Quarter	Oct. 31-Nov. 3	Oct. 30-Nov. 2
Thanksgiving recess	Nov. 24-27	Nov. 23-26
Examinations	Dec. 13-16	Dec. 12-15
Winter Quarter		
Registration	Jan. 3	Jan. 2
Classes begin	Jan. 3	Jan. 2
Last day for late registration and class changes	Jan. 9	Jan. 9
Midterm: Last day to withdraw from a course without penalty	Feb. 7	Feb. 6
Last day to apply for June graduation	Feb. 7	Feb. 6
Preregistration for Spring Quarter	Feb. 13-16	Feb. 12-15
Examinations	March 7-10	March 6-9
Spring Quarter		
Registration	March 13	March 12
Classes begin	March 13	March 12
Last day for late registration and class changes	March 31	April 2
Spring recess	April 3-9	April 1-8
Classes resume	April 10	April 9
Dissertation/thesis approval form due in dean's office	April 24	April 23
Midterm: Last day to withdraw from a course without penalty	April 28	April 30
Last day to apply for Summer graduation	April 28	April 30
Preregistration for Summer and Fall Quarter	May 1-4	April 23-26
Examinations	May 30-June 2	May 29-June 1
Graduation	June 10	June 9
Summer Quarter		
Registration	June 14	June 13
Classes begin	June 15	June 14
Last day for late registration and class changes	June 20	June 20
Independence Day recess	July 3-4	July 4
Preregistration for Fall Quarter	July 10-13	July 16-19
Midterm: Last day to withdraw from a course without penalty	July 21	July 19
Examinations	Aug. 26, 28-30	Aug. 24-25, 27
Graduation	Sept. 30	Aug. 30

School of Medicine Calendar

Phase I	Academic Year 1977-78	Academic Year 1978-79
First Quarter (14 Weeks)		
Orientation and registration	Sept. 7-9	Sept. 6-8
Classes begin	Sept. 12	Sept. 11
Thanksgiving recess	Nov. 24-27	Nov. 23-26
Classes end	Dec. 16	Dec. 15
Christmas vacation	Dec. 17-Jan. 2	Dec. 16-Jan. 1
Second Quarter (10 Weeks)		
Classes begin	Jan. 3	Jan. 2
Classes end	March 10	March 9
Third Quarter (11 Weeks)		
Classes begin	March 13	March 12
Spring vacation	April 3-9	April 1-8
Classes resume	April 10	April 9
Classes end	June 2	June 1
Phase II		
First Quarter (15 Weeks)		
Classes begin	Sept. 6	Sept. 11
Thanksgiving vacation	Nov. 24-27	Nov. 23-26
Classes end	Dec. 16	Dec. 15
Christmas vacation	Dec. 17-Jan. 2	Dec. 16-Jan. 1
Second Quarter (10 Weeks)		
Classes begin	Jan. 3	Jan. 2
Classes end	March 10	March 9
Third Quarter (10 Weeks)		
Classes begin	March 13	March 12
Spring vacation	April 3-9	April 1-8
Classes resume	April 10	April 9
Classes end	May 26	May 25
Phase III	The year is divided into rotations consisting of four, six, eight, and twelve week periods beginning June 13, 1977 and ending June 4, 1978. Vacations, as a rule, are the same as for Phase I and Phase II except for certain designated electives.	The year is divided into rotations consisting of four, six, eight, and twelve week periods beginning June 11, 1978 and ending June 3, 1979. Vacations, as a rule, are the same as for Phase I and Phase II except for certain designated electives.
Graduation	June 10	June 9
Part I National Board Examination	June 13-14, 1978 Sept. 6-7, 1978	*June 12-13, 1979 *Sept. 5-6, 1979
Part II National Board Examination	April 11-12, 1978 Sept. 26-27, 1978	*April 10-11, 1979 *Sept. 25-26, 1979

*Tentative Dates.

allied health sciences

Dean—Dr. Raymond C. Bard
Associate Dean for Academic Affairs—Dr. Biagio J. Vericella

School of Allied Health Sciences

The School of Allied Health Sciences at the Medical College was established as an administrative entity in 1968. Prior to this date, programs in medical illustration, medical record administration, medical technology and radiologic technology have been active; in 1967, the dental hygiene program was initiated. Since then, five additional programs, physical therapy, occupational therapy, physician's assistants, nuclear medicine technology, and respiratory therapy have been added to the school. The school is organized into departments, providing programs for each of the allied health professions and leading to the baccalaureate degree. In addition, the Associate in Science degree is awarded in dental hygiene, dental laboratory technology, physical therapy and radiologic technology. Certificate programs are offered in nuclear medicine technology and radiation therapy technology.

Information pertaining to application, admission, fees and expenses, loans and scholarships can be found in each department's section of this book or in the General Information section of the *Catalog*.

Goals

The School of Allied Health Sciences supports the goals of the Medical College of Georgia and accepts the responsibility to promote quality health care for the people of Georgia. The School of Allied Health Sciences is dedicated to:

- The preparation of qualified allied health practitioners;
- the development and implementation of competency-based educational curricula that will meet the needs of students;
- the provision of continuing education programs for allied health practitioners;
- the promotion of cooperation among the departments and schools of the Medical College of Georgia to provide interdisciplinary educational programs;
- the collaboration with the people of Georgia in surveying health care needs and fulfilling these through allied health education programs and research;
- the creation of public awareness for allied health practitioners and their roles in the delivery of health care;
- the generation and application of new knowledge for the betterment of health services;
- the participation of students and faculty in professional health organizations.

Application Procedures

Application forms with instructions for completing the admission procedure may be obtained from the Office of Academic Admissions. Applications for entering classes should be filed no later than April 15 of the year of matriculation.

Early application is recommended. No application fee is required.

Admission Criteria

Preference will be given the applicant who has demonstrated superior academic ability. The applicant must present evidence of graduation from an accredited high school or its equivalent. Preference will be given the applicant to undergraduate programs who has emphasized high school subjects in the sciences (mathematics, chemistry, physics, biology, zoology) and the liberal arts. The entering freshman must present credentials to indicate completion of the following high school credits from an accredited high school.

	Units
English	4
Mathematics (must include one unit of algebra)	2
Science (general biology, chemistry, physics)	2
Social studies (one unit of American history)	4
Other academic units	2
Unrestricted electives	2

High school level test of General Education Development will be accepted.

Associated Dental Sciences

In cooperation with the School of Dentistry, this department offers programs of study leading to the Associate in Science and Bachelor of Science degrees in dental hygiene, and the Associate in Science degree in dental laboratory technology.

The Department of Associated Dental Sciences also provides an educational program offering

courses at the graduate level to prepare participants for careers in teaching and administration. Upon completion of requirements, candidates are awarded the Master of Health Education degree. For details, refer to the School of Graduate Studies section of this *Catalog*.

The department also offers a baccalaureate program in dental hygiene for practicing dental hygienists who are graduates of an accredited associate degree program and who desire to become dental hygiene educators. Prospective candidates to this program should write directly to the chairman, Department of Associated Dental Sciences, Medical College of Georgia for further information.

Objectives

1. Dental Hygiene

The associate degree and the baccalaureate degree programs in dental hygiene have been designed to prepare graduates for clinical practice under the supervision of the licensed dentist.

The graduate has developed knowledge and skills in the prevention of dental disease, this being the primary duty of the dental hygienist. Other skills developed during training at the Medical College of Georgia includes the taking and recording of dental and medical histories, oral inspection, exposing the processing of dental radiographs removal of deposits and stains from teeth, polishing teeth, application of preventive agents, preparation of diagnostic casts and other duties that may be assigned by the practicing dentist and which are lawful in the state of practice.

Graduates are eligible to take the National Board Examination for Dental Hygiene and State Board Examinations for Dental Hygiene.

Additional training is provided for baccalaureate degree students in one of three areas: clinical, dental hygiene education, or public health. Graduates of the baccalaureate program are eligible to apply for graduate study in dental hygiene such as dental hygiene education and public health.

2. Dental Laboratory Technology

The primary objective of the dental laboratory technology program is to help provide, to the dental profession and the dental laboratory industry, dental technologists who are knowledgeable and have gained skills in their craft through classroom learning and practical application.

To accomplish the primary objective the following subobjectives have been adopted:

1. To develop the skills of the student in handling materials used in the construction of dental prosthetic appliances.
2. To provide the student with construction methods and processes that are desirable in the dental laboratory technology field.
3. To develop a working knowledge of dental terminology to be used in successive quarters and application of same to the work.
4. To develop work habits and behavior patterns required for success and advancement in the dental laboratory industry.
5. To carefully analyze the aptitudes of the student to aid her/him in areas where weaknesses prevail.
6. To stress and to develop personalities, resourcefulness, and initiative necessary for a successful career in the dental laboratory technology field.

The program was developed in cooperation with the Augusta Area Vocational Technical School in response to the need for trained dental laboratory technologists. Students enrolled in this program attend classes at the Medical College of Georgia, Augusta Area Vocational Technical School, and Augusta College.

Accreditation

Both the Dental Hygiene and Dental Laboratory Technology programs are fully accredited by the Commission on Accreditation, American Dental Association.

Admission Requirements

The general policy regarding the acceptance of courses by transfer is to allow credit for courses completed with satisfactory grades ("C" or better). At the discretion of the department chairperson or program director a "D" grade may be accepted for transfer credit. The cumulative grade point average of all transfer credit should be a minimum of 2.5.

Personal interviews will be scheduled by the Director of Admissions prior to admission.

Associate Degree Dental Hygiene Program

1. Graduate of an accredited high school.
2. One academic year of high school biology or one course in college biology with lab.

3. One academic year of high school chemistry or one course in college general chemistry.
4. CEEB-SAT scores.

Preference will be given to applicants who have demonstrated superior academic ability in the sciences. While not required, work experience in the dental office is beneficial.

Baccalaureate Degree Dental Hygiene Program

To prepare for the baccalaureate degree program in dental hygiene, the high school student should pursue a course of study similar to that for the associate degree program.

Additionally, a minimum of 90 quarter or 60 semester hours in general education courses are required, as follows:

English and Humanities	Credit Hours
English Composition	5
English Literature	5
Speech	5
Elective (English, Religion, Humanities, Drama, Foreign Language)	5
Total	20

Math-Science	
Biology with lab	5
Chemistry with lab	5
Additional Biology or Chemistry with lab	5
Math	5
Total	20

Social Science	
*U.S. History	5
*Political Science	5
Sociology	5
Elective (History, Sociology, Psychology)	5
Total	20

Major Area Electives 30

Electives supportive to the dental hygiene major should include additional chemistry, biology, social sciences, and education courses.

*These courses must satisfy the Georgia legislative requirements. Exemption examinations may be taken by both in and out-of-state students to satisfy the legislative requirements; however no credit is given.

Dental Laboratory Technology

1. Graduate of an accredited high school.
2. CEEB-SAT scores.
3. Dexterity test (arranged by department).

Preference will be given to applicants who have demonstrated superior academic achievement.

Application Procedures

Refer to the School of Allied Health Sciences section of this *Catalog*.

Estimated Fees and Expenses

Matriculation and other fees common to all programs are stated in the General Information section of this *Catalog*. Estimated additional expenses specific to dental hygiene and dental laboratory technology are as follows:

Dental Hygiene

	First Year	Second Year
Books	$120.00	$120.00
Field Trips	---	100.00
Instruments	265.00	25.00
Uniforms	210.00	---
Total	$595.00	$245.00

Dental Laboratory Technology

	First Year	Second Year
Books	$ 70.00	$ 70.00
Instruments/Supplies	125.00	50.00
Uniforms	20.00	---
Extramural travel	50.00	50.00
Total	$265.00	$170.00

Curriculum

Dental Hygiene—Associate Degree Program

First Year

Fall Quarter		Credit Hours
*CMD 140	Introduction to Preventive Dentistry	1
DH 100	Pre-Clinical Dental Hygiene	3
*ANM 132	Anatomy and Physiology	6
DH 120	Oral and Dental Anatomy	3
*BIO 131	Dynamic Biochemistry of Living Systems I	3
DH 110	Introduction to Patient Care	2
	Total	18

Winter Quarter		Credit Hours
DH 101	Clinical Dental Hygiene	3
DH 111	Dental Hygiene Lecture	2
*BIO 132	Dynamic Biochemistry of Living Systems II	3
*DPS 121	Dental Materials	1
DH 122	Introduction to Dental Specialities	2
*PATH 130	Pathology	4
*DH 145	Interpersonal Communications and Behavior Modification	3
	Total	18

Spring Quarter		
DH 102	Clinical Dental Hygiene	3
DH 112	Dental Hygiene Lecture	2
DH 123	Intramural Clinics	1
*RADD 128	Dental Radiology	3
*PER 160	Peridontics	2
*MIB 130	Microbiology	5
*OMD 140	Nutrition	2
	Total	18

Summer Quarter		
†ENG 101	College Composition I	5
†SPC 101	Fundamentals of Speech	5
†SOC 101	Introductory Sociology	5
	Total	15
	First Year Total	69

Second Year

Fall Quarter		Credit Hours
DH 200	Dental Hygiene Clinic	4
††DH 223	Intrumural Clinic	
††*RADD 228	Radiology Technique	
DH 241	Introduction to Public Health	4
*PHM 230	Pharmacology	4
DH 240	Preventive Dentistry	1
†ENG 102	English Composition	5
DH 250	Introduction to Educational Media	2
	Total	20

Winter Quarter		
DH 201	Dental Hygiene Clinic	4
*OBIO 223	Cariology	2
††DH 223	Intramural Clinic	
††*RADD 228	Radiology Technique	
*PER 261	Periodontic Seminar	2
DH 242	Public Health Field Experience	4
*OMD 220	Oral Medicine	2
	Total	14

Spring Quarter		Credit Hours
DH 210	Ethics, Jurisprudence and Practice	2
DH 202	Dental Hygiene Clinic	4
DH 223	Intramural Clinic	1
*RADD 228	Radiology Technique	1
†HIS 211	American History	5
†POL 101	American Government I	5
	Total	18
	Second Year Total	52
	Seven Quarter Total	121

*See School of Dentistry course descriptions for full description.
†Augusta College.
††Credit given when course is completed at the end of the Spring Quarter.

Dental Hygiene—Baccalaureate Degree Program

Junior Year

Fall Quarter		Credit Hours
*CMD 340	Introduction to Preventive Dentistry	1
DH 300	Pre-Clinical Dental Hygiene	3
*ANM 332	Anatomy and Physiology	6
DH 320	Oral and Dental Anatomy	3
*BIO 331	Dynamic Biochemistry of Living Systems I	3
DH 310	Introduction to Patient Care	2
	Total	18

Winter Quarter		
DH 301	Clinical Dental Hygiene	3
DH 311	Dental Hygiene Lecture	2
*BIO 332	Dynamic Biochemistry of Living Systems II	3
*DPS 321	Dental Materials	1
DH 322	Introduction to Dental Specialties	2
*PATH 330	Pathology	4
*DH 345	Interpersonal Communications and Behavior Modification	3
	Total	18

Spring Quarter		
DH 302	Clinical Dental Hygiene	3
DH 312	Dental Hygiene Lecture	2
DH 323	Intramural Clinics	1
*RADD 328	Dental Radiology	3
*PER 360	Periodontics	2
*MIB 330	Microbiology	5
*OMD 340	Nutrition	2
	Total	18
	Junior Year Total	54

Senior Year

Fall Quarter		Credit Hours
DH 400	Dental Hygiene Clinic	4
††DH 423	Intramural Clinic	
††*RADD 428	Radiology Technique	
DH 441	Introduction to Public Health	4
*PHM 430	Pharmacology	4
DH 440	Preventive Dentistry	1
DH 450	Introduction to Educational Media	2

Plus one of the following Career Tracts

Clinical Tract

*PER 465	Periodontics—Clinical I	3

Community Dentistry Tract

DH 444	Community Dental Health I	3

Education Tract

DH 454	Educational Psychology	3
	Total	18

Winter Quarter

DH 401	Dental Hygiene Clinic	4
OBIO 423	Cariology	2
††DH 423	Intramural Clinic	
††*RADD 428	Radiology Technique	
*PER 461	Periodontic Seminar	2
DH 442	Public Health Field Experience	4
*OMD 420	Oral Medicine	2

Plus one of the following Career Tracts

Clinical Tract

*PER 466	Periodontics—Clinical II	3

Community Dentistry Tract

DH 445	Community Dental Health II	3

Education Tract

DH 458	Educational Tests and Measurements	3
	Total	17

Spring Quarter

DH 410	Ethics, Jurisprudence and Practice	2
DH 402	Dental Hygiene Clinic	4
DH 423	Intramural Clinic	1
*RADD 428	Radiology Technique	1

Plus one of the following Career Tracts

Clinical Tract

*PER 467	Periodontics—Clinical III	4
DH 405	Dental Hygiene Practice	4

Community Dentistry Tract

DH 446	Community Dental Health III	8

Education Tract

DH 455	Careers in Dental Hygiene Education	8
	Total	16
	Senior Year Total	51
	Six Quarter Total	105

*See School of Dentistry course descriptions for full description.
†Augusta College.
††Credit given when course is completed at the end of the Spring Quarter.

Dental Laboratory Technology

First Year

Fall Quarter		Credit Hours
DLT 101	Physics and Chemistry of Dental Materials	5
DLT 111	Dental Materials Laboratory	3
DLT 112	Head and Neck Anatomy	2
DLT 121	Dental History, Ethics and Jurisprudence	1
OCC 101	Dental Anatomy and Occlusion	5
	Total	16

Winter Quarter

OCC 112	Principles of Occlusion and Mastication	3
DLT 113	Crown and Bridge	6
DLT 115	Disease and Contamination Prevention	1
†ENG 101	College Composition I	5
*DLT 233/ 234	Selected Topics	1-5
	Total	16-20

Spring Quarter

DLT 116	Dental Ceramics	8
†ENG 102	College Composition II	5
†POL 101	American Government	5
*DLT 233/ 234	Selected Topics	1-5
	Total	19-23

Summer Quarter

DLT 218	Advanced Dental Ceramics	7
DLT 214	Complete Dentures	5
DLT 215	Orthodontics and Pedodontics	2
	Total	14
	First Year Total	63

Second Year

Fall Quarter		Credit Hours
DLT 213	Removable Partial Dentures	8
†SPC 101	Fundamentals of Speech	5
†HIS 211	U.S. History	5
*DLT 233/234	Selected Topics	1-5
	Total	19-23

Winter Quarter		
DLT 216	Advanced Complete Dentures	5
DLT 221	Principles of Laboratory Management	5
†ECN 101	Economics	5
*DLT 233/234	Selected Topics	1-5
	Total	16-20

Spring Quarter		
DLT 222	Laboratory Practice	10
DLT 225	Dental Technology Seminar	5
	Total	15
	Second Year Total	48
	Seven Quarter Total	111

*Selected topics DLT 233/234 is offered as an elective the second, third, fifth and sixth quarters for those students who have completed one or more of the general education courses prior to admission.
†Augusta College.

Academic Promotion and Graduation

For academic promotion and graduation policies, refer to the General Information section of this *Catalog*.

Medical Illustration

It is anticipated that one or more undergraduate programs will be developed in biocommunication, such as biomedical photography, biomedical graphic technology or communication media technology. Descriptions of such programs will appear in future bulletins.

Information on the program in medical illustration can be found in the School of Graduate Studies section.

Medical Record Administration

This department offers a program of studies leading to the Bachelor of Science degree in Medical Record Administration. This program was approved in 1962 by the Board of Regents of the University System of Georgia. Students are accepted after completion of two years of college. The curriculum of the last two years utilizes the facilities of Augusta College and the Medical College of Georgia. Professional educational activities are provided in the teaching hospital of the college, Talmadge Memorial Hospital, and other institutions in the city of Augusta, and hospitals in other cities in Georgia and adjoining states. Student enrollment is limited.

The professional program of the junior and senior years includes study and experience in all areas of medical record administration, statistics, medical language and fundamentals of medical science, law as it relates to health care, management, and systems and methods of processing health information.

The role of the medical record administrator is constantly changing. In order to meet new demands of health care delivery systems, special emphasis in this curriculum is placed on management and systems analysis and design. Set in one quarter is a curriculum concentration devoted to preparing the graduate to actively participate with systems engineers and other types of planners in analyzing and developing methods and procedures for processing information, both manually and using the computer.

Objectives

A medical record administrator is responsible for the development and maintenance of a system of health records which will promote the best medical care for the patient, provide training materials for interns and residents, and serve as a source of information for medical research and clinical evaluation.

As a member of the health care team, the medical record administrator works with the administrative, medical, and other professional staffs of the institution; he is concerned with the

development, analysis, maintenance and use of records and reports.

The Department of Medical Record Administration of the Medical College of Georgia has as its goal the education of mature persons who are capable of utilizing the vast resources of the institution to acquire knowledge and attain professional status. The student is encouraged to set his own goals and, through faculty leadership, develop to his fullest potential. It is expected that graduates will be equipped to become productive and contributory members of the profession and the institution in which they are employed and capable of accepting the responsibilities of management and service required of them. It is hoped that graduates will acquire advanced degrees and become teachers and leaders in this challenging field of health science.

Opportunities

Although most medical record administrators are employed by hospitals, other employment opportunities are available in clinics, group medical practice, insurance companies, other health care centers and facilities, research centers, and with federal, state, and local governmental agencies.

The demand for qualified professionals is great. The number of available positions has increased due to the increase in the number and types of health care facilities and the increased complexity of health care delivery in the United States.

Accreditation

The Department of Medical Record Administration is approved by the Committee on Allied Health Education of the American Medical Association and the American Medical Record Association.

Graduates are eligible for the registration examination of the American Medical Record Association, successful completion of which entitles them to use the title "Registered Record Administrator" (RRA).

Admission Requirements

The applicant may attend any accredited college or university of his choice for the freshman and sophomore years; however, admission and academic requirements of the Medical College of Georgia must be met. Preference will be given to those applicants who have demonstrated superior ability in all academic areas. The History and Constitution and RTPE requirements for graduation as listed in the MCG general section are the responsibility of the student and should be met prior to admission.

Accepted students transfer to the Medical College program in Medical Record Administration at the beginning of the third year. Admission requirements, in addition to those listed in the General Information section, include a curriculum for the freshman and sophomore years which shows a minimum of 90 quarter hours (exclusive of Physical Education) of acceptable work as follows:

Humanities	**Credit Hours**
*Composition	5
*Literature	5
Electives (Composition, Literature, or Humanities)	10
Total	20

Natural Sciences	
*Mathematics (To include college Algebra)	5
*Two-Course sequence in Biology (with Lab)	10
Chemistry (with Lab)	5
Science elective (with or without Lab)	5
Total	25

Social Sciences	
*History (U.S. History Recommended)	5
*Government-Political Science	5
Electives (Choose from Philosophy, Psychology, Sociology, Economics)	15
Total	25

Electives	
Choose from secretarial science, business correspondence, report writing, speech, art or music appreciation, history, religion, data processing, or other of choice.	
Total	20

*Satisfies specific core curriculum requirements of the University System of Georgia.

It is recommended that the student NOT take courses in anatomy and physiology since they are part of the professional curriculum.

Typing credit or proficiency must be demonstrated.

All admission prerequisite courses must be completed prior to registration in the Fall Quarter of the senior year.

The faculty of the Department of Medical Record Administration is prepared to assist prospective students in planning courses for the first two years of college.

Estimated Additional Expenses Specific to Medical Record Administration

	First Year	Second Year
Books and Supplies	$200.00	$150.00
Uniforms	100.00	---
Living Cost on Affiliation	---	200.00
Total	$300.00	$350.00

Current information about fees and expenses will be supplied with application materials.

Matriculation and other fees are stated in the General Information section of this *Catalog*.

Special Fees and Expenses

The student should make provision for living expenses for one month while on assignment to hospitals outside the city of Augusta. Students are encouraged to attend professional meetings for which they will bear the expense of travel, room and board and registration fee. Such meetings do no usually last more than two days.

Application Procedure

Application materials may be secured from the Office of Academic Admissions. No application fee is required.

Early application is recommended. Applications for the September class should be filed at least by April of that year, and transcripts should be submitted as work is completed.

A personal interview on the MCG campus with faculty members is required and must be scheduled by the applicant. Early scheduling of interviews is recommended.

Completed applications will be reviewed and applicants notified of the final action on their applications by June 1.

Financial Assistance

The American Medical Record Association has limited funds for loans to senior students in this program. Information may be secured from the office of the chairman of the Department of Medical Record Administration. For information on other funds available, see the General Information section.

Curriculum

At the beginning of the third year of college the student enters the program at the Medical College of Georgia. Courses in the professional program are offered on this campus and at Augusta College. Organized courses are described below. Directed experiences are planned in several hospitals, principally at Talmadge Memorial Hospital, the teaching hospital for the Medical College of Georgia. Only grades of "C" or above are acceptable in professional courses.

Junior Year

Fall Quarter		Credit Hours
*ANM 310	Survey of Human Anatomy	5
MRA 301	Medical Terminology I	3
MRA 310	Theory of Medical Record Administration I	5
MRA 319	Principles of Management	5
	Total	18

Winter Quarter		
MRA 302	Medical Terminology II	3
MRA 311	Theory of Medical Record Administration II	3
MRA 320	Organization and Administration I	5
MRA 340	Directed Experience I	2
*PHY 210	Introductory Human Physiology	5
	Total	18

Spring Quarter		
MRA 341	Directed Experience II	3
MRA 401	Fundamentals of Medical Science I	5
MRA 410	Theory of Medical Record Administration III	6
MRA 420	Organization and Administration II	3
	Total	17

Years Total Credit Hours 53

Senior Year

Fall Quarter		Credit Hours
**HS 450	Elementary Medical Statistics	3
MRA 402	Fundamentals of Medical Science II	5
MRA 411	Theory of Medical Record Administration IV	5
MRA 422	Legal Concepts for the Health Fields	3
MRA 440	Directed Experience III	2
	Total	18

Winter Quarter		
MRA 415	Medical Record Administration Information Systems	18
	Total	18

Spring Quarter		
MRA 421	Organization and Administration III	5
MRA 425	Seminar	3
MRA 441	Directed Experience IV	8
	Total	16

Years Total Credit Hours 52

*See School of Medicine Course Descriptions.
**See Health Systems Courses in Course Descriptions.

Medical Technology

Medical Technology is an established allied health profession that assists in patient diagnosis and monitoring of treatment through laboratory application of biological, chemical, immunologic and microscopic study of body fluids and tissues.

The medical technologist is in a unique position: The areas of his or her activities, while being predominantly intellectual, require the ability to utilize specialized technological and manual skills.

The Medical College of Georgia campus affords a university environment in which to acquire the essential knowledge and abilities. Faculty is available to provide expertise in all areas; the affiliated hospitals provide a wide variety of learning experience for the students as well as the opportunity to interact with other members of the health team.

Objectives

The primary objectives of the Department of Medical Technology are to assist students in their achievement of entry level competency in the profession and in the definition of their future professional goals as medical technologists.

A primary goal of the program is to encourage a graduated academic experience, so that the student can gain increasing confidence and competence in the variety of subjects which have to be mastered in order to engender the best in patient care. Continued revision of the curriculum permits an emphasis on specific areas of student interest and projected professional needs.

Accreditation

The Department of Medical Technology is accredited by the Council on Medical Education of the American Medical Association in collaboration with the National Accrediting Agency for Clinical Laboratory Sciences. Upon successful completion of the program, graduates are eligible for certification by examination for medical technologists by the Board of Registry of the American Society of Clinical Pathologists.

Admission Requirements

Admission and academic requirements of the Medical College of Georgia must be met. Applicants may attend any accredited college or university of their choice for the freshman and sophomore years. Accepted students transfer to the Medical College of Georgia program in Medical Technology at the beginning of their third year. Preference will be given to those applicants who have demonstrated superior ability in all academic areas. A personal interview is also required of all applicants.

Admission requirements, in addition to those listed in the General Information section, include a minimum of 90 quarter hours of acceptable work, exclusive of Physical Education. All applicants must satisfy the U.S. and Georgia History and Constitution requirements by examination or academic courses; it is the responsibility of each student to make the necessary arrangements prior to enrollment at the Medical College of Georgia.

Core requirements for admission to the junior year include:

Area I—English-Humanities	Quarter Hours
Composition	5
Literature or Humanities	5
Electives: (Chosen from: art; English; foreign language(s); humanities; literature; philosophy; religion; or speech)	10
Total	20

Area II—Natural Sciences*	**Quarter Hours**
Math:	10
(Chosen from: algebra; statistics (recommended); pre-calculus; analytical geometry)	
Chemistry, General Inorganic	10
Hours Required	20

Area III—Social Sciences	
**History	5
**Political Science	5
Electives:	10-20
(A course in psychology is strongly recommended. Other electives may be chosen from: anthropology; ethics; geography; history; philosophy or political science.)	
Hours Required	20

Area IV—Major Area*	
A. Biology	
Anatomy and/or Physiology	5-10
Electives:	5-10
(Chosen from: general biology; ecology; immunology; genetics; histology; microbiology; parasitology; or zoology)	
B. Chemistry	
Chemistry, Organic	5
Chemistry, Quantitative Analysis *Preferred.* (If unavailable, qualitative analysis accepted.)	5
C. Electives	5
(Choose one course from: physics (electricity or magnetism); physical science; or medical physics)	
Hours Required	30
Total Hours Required	90

*Courses must be acceptable toward a science major.
**These courses must satisfy the Georgia legislative requirements. Exemption examinations may be taken by in- and out-of-state students to satisfy these requirements.

Application Procedures

Application forms with instructions for completing the admission procedure may be obtained from the Office of Academic Admissions. Although early application is encouraged, preferably prior to April 15th, applications will be accepted until August 1st for the entering September class. Applications received after this time will be considered on an individual basis. No application fee is required.

Students may begin their senior year either in the summer or fall quarters. Students will be assigned to senior classes at the completion of fall quarter. When notified of acceptance, the applicant is requested to accept or decline the appointment in writing to the Department of Medical Technology no later than six weeks prior to the intended admission date.

Estimated Fees and Expenses Specific to Medical Technology

	First Year	Second Year
*Books and Supplies	$225.00	$295.00
**Uniforms, Lab Coats	25.00	110.00
Total	$250.00	$405.00

*Matriculation and other fees are stated in the General Information section of this *Catalog.*
**During Clinical Practicum—Senior Year—female students are required to wear white uniforms and shoes; male students are required to wear shirts with tie, trousers and short white lab coats.

Financial Aid

Refer to General Information section of this *Catalog.*

Curriculum

The curriculum covers the junior and senior years, a seven quarter course of study, leading to the Bachelor of Science degree with a major in medical technology.

Classroom and laboratory experiences are provided on the Medical College campus. Clinical experiences are planned at several hospitals, principally at the Talmadge Memorial Hospital and the University Hospital, Augusta, Georgia where the student obtains a broad base of experiences in a variety of practical settings.

Junior Year		Credit Hours
Courses scheduled from the following:		
*CMB 345	Biochemistry	5
MTC 302	Laboratory Medicine Case Presentation	1
MTC 303	Laboratory Medicine Case Presentation	1
MTC 304	Laboratory Medicine Case Presentation	1
MTC 305	Laboratory Medicine Case Presentation	1
MTC 309	Education	1
MTC 308	Venipuncture Technique	2
MTC 307	Introduction to Medical Technology	1
MTC 366	Clinical Chemistry I	5
MTC 367	Clinical Chemistry II	5
MTC 363	Urinalysis and Fluids	3
MTC 372	Diagnostic Microbiology I	6
MTC 371	Medical Mycology and Parasitology	5
MTC 375	Basic Immunology	3
MTC 381	Clinical Hematology I	6
MTC 391	Techniques of Management	2
MTC 394	Directed Individual Study	(TBA)
MTC 395	Directed Individual Study—Blood Bank	(TBA)
MTC 396	Directed Individual Study—Chemistry	(TBA)
MTC 382	Clinical Microscopy and Hematology	5
MTC 397	Directed Individual Study—Hematology	(TBA)
MTC 398	Directed Individual Study—Microbiology	(TBA)
MTC 399	Directed Individual Study—Instrumentation	(TBA)

Senior Year		Credit Hours
Courses scheduled from the following:		
MTC 440	Clinical Chemistry	10
MTC 442	Clinical Practicum Chemistry	10
MTC 460	Advanced Instrumentation	7
MTC 448	Diagnostic Microbiology II	9
MTC 449	Clinical Practicum Microbiology	10
MTC 472	Immunohematology Related to Transfusion Service	9
MTC 473	Clinical Practicum Blood Bank	10
MTC 474	Diagnostic Immunology	4
MTC 481	Clinical Hematology II	9
MTC 482	Clinical Practicum Hematology	10
MTC 493	Medical Technology Seminar	1
MTC 494	Directed Individual Study	(TBA)
MTC 495	Directed Individual Study—Blood Bank	(TBA)
MTC 496	Directed Individual Study—Chemistry	(TBA)
MTC 497	Directed Individual Study—Hematology	(TBA)
MTC 498	Directed Individual Study—Microbiology	(TBA)
MTC 499	Directed Individual Study—Instrumentation	(TBA)

*See School of Medicine Course Descriptions.

Years Total Credit Hours

All students must satisfy the three-year requirement of the Registry of Medical Technologists of the American Society of Clinical Pathologists before admission to senior standing. These requirements include a minimum of 24 quarter hours of chemistry and 24 quarter hours of biology.

Academic Promotion and Graduation

Students are referred to the MCG *Catalog*—General Information section, for further policies and procedures concerning academic probation and academic suspension.

Promotion of the student from one year to the next in the program is dependent upon the satisfactory completion of each year's work. Promotions are considered on the basis of recommendations by individual instructors or departmental evaluations, and on the student's total record.

All students must earn a "C" or better in each course, unless otherwise indicated, in order to continue in the professional program.

The faculty has the obligation and right to determine the methods of evaluation, and to evaluate each student individually in compliance with Medical College of Georgia and departmental guidelines. Major area examinations are required at the end of the fourth year for review and self-evaluation.

Master of Health Education

The Department of Medical Technology provides an educational program offering courses at the graduate level to prepare participants for careers in more highly skilled clinical practice, teaching, and administration. Upon completion of requirements, candidates are awarded the degree of Master of Health Education. (For details refer to School of Graduate Studies section of this *Catalog*.)

Occupational Therapy

General

Occupational therapy is a health profession which contributes to the physical and emotional independence and well-being of an individual through the use of selected activities. The focus of occupational therapy is meaningful involvement in problem-solving tasks and productive performance to promote and maintain health, evaluate behavior, diminish dysfunction and pathology, and enhance the capacity to function with satisfaction to self and others.

The frame of reference of occupational therapy is derived from the biological and behavioral sciences with particular emphasis on those aspects related to man's acquisition and integration of behavior necessary for self-care, productivity and social development.

The functions of occupational therapists are to:

A. Serve the individual client or patient by:
   1. Assessing his performance capacities and deficits.
   2. Selecting tasks or activity experiences appropriate to his defined needs and goals.
   3. Facilitating and influencing his participation and investment.
   4. Evaluating his response, assessing and measuring change and development.
   5. Validating assessments, sharing findings and making appropriate recommendations.

B. Provide consultative services in relation to the profession and its functions.

C. Provide administrative and supervisory leadership for occupational therapy programs.

D. Facilitate and participate in community health care planning and activities.

E. Promote, plan, implement and conduct research for the benefit of the public and the growth of the profession.

Upon referral from qualified physicians and others in the broader health care community, the registered occupational therapist may focus on one or more of the following:

Prevention and Health Maintenance, which has as its purpose the fostering of normal development, sustaining and protecting existing functions and abilities, preventing disability and/or supporting levels of restoration or change.

Remediation, which focuses on the reduction of pathology or specific disability, providing task and activity experience which may diminish the particular impairment, restore or develop the individual's capacity to function.

Daily Life Tasks and Vocational Adjustment, which are primarily concerned with work adaptation and work role adjustment and where the tasks chosen are those which will promote and teach independent functioning, develop and enhance the ability to work and/or fulfill age-specific life tasks and roles.

Objectives

Education

To educate occupational therapists with the following characteristics:

1. Knowledgeable in the theory and application of the techniques and skills of the profession in any environment.
2. A questioning attitude toward the theory and application of the knowledge of the profession.
3. Ability to interact with others in a manner which promotes collaboration, cooperation and consultation.
4. Self-directed to increase knowledge and awareness of the environmental factors which require updating techniques and skills to keep abreast of a dynamic profession.

Service

The Occupational Therapy Department has the responsibility of providing direct and consultative services to the community. This service shall demonstrate the effectiveness of multiple approaches to problems and possible resolutions. All services shall demonstrate high standards of treatment and personal and professional ethics. The occupational therapy department will demonstrate responsible action toward accommodating and influencing the changing systems of health care delivery.

Research

Within the framework of the stated purpose of research at the Medical College of Georgia, this department will encourage and seek support for research in the areas of prevention, restoration and maintenance of the individual's functional capacity consistent with his life style and as these are related to education and health care delivery in hospital and community.

Accreditation

The curriculum in occupational therapy at the Medical College of Georgia is accredited by the American Occupational Therapy Association and the Council on Medical Education of the American Medical Association.

A Bachelor of Science degree is awarded upon successful completion of the curriculum and fulfillment of the requirements of field work. The graduate is then recommended to sit for the national certification examination leading to admission to the National Registry maintained by the American Occupational Therapy Association.

Graduates are eligible to apply for licensure which is required in Georgia and some other states.

Admission Requirements

Applicants may attend any accredited college or university of his choice for the freshman and sophomore years; however, all requirements of the Medical College of Georgia must be met.

The following subjects or subject areas are to be included in the students pre-professional course work:

Humanities	**Credit Hours**
Grammar and Composition	5
Literature	5
Electives	10
Total	20
Natural Sciences	
Biology (with Lab)	10
General Chemistry (with Lab)	5-10
Physics/Physical Sciences	5
Mathematics	5
Total	25-30
Social Sciences	
History	5
Political Science	5
General Psychology	5
Abnormal Psychology	5
Sociology	10
Total	30
Electives	
It is suggested that some electives be taken in fine and applied arts; manual arts; home economics; and/or additional sciences.	
Total	15

Prior to graduation students must satisfy the Georgia legislative requirements for U.S. and Georgia History and Constitution by course work or examination.

Interested applicants should contact the Medical College of Georgia, School of Allied Health Sciences, Department of Occupational Therapy as early in their academic program as possible.

Application Procedures

Application forms with instructions for completing the admission procedure may be obtained from the Office of Academic Admissions.

Early application is recommended. No application fee is required.

1. It is best to complete all application requirements by April 15 of the year in which one is applying for admission in September. Applications completed after this time will be considered on a space available basis.
2. Have a personal interview with the department admissions committee prior to April of the year one is applying for fall admission.
3. Have completed at least 90 quarter hours (60 semester hours) exclusive of physical education with a minimum grade point average (on a 4.0 system) of C (2.0) overall and C+ (2.5) in the sciences.

Estimated Additional Expenses* Specific to Occupational Therapy

	First Year	**Second Year**
Books and Supplies	$250.00	$175.00
Uniforms	75.00	———
Field Trips and Travel	85.00	350.00
Total	$410.00	$525.00

*Matriculation and other fees are stated in the General Information section of this *Catalog*.

Financial Aid

In addition to the sources of financial aid available to all college students, there are some sources available specifically for students enrolled in both the baccalaureate and graduate occupational therapy curricula. For information on these sources contact: Chairman, Department of Occupational Therapy, Medical College of Georgia.

Curriculum

The occupational therapy curriculum is designed as a continuum of learning experiences so organized as to facilitate the personal and professional growth of the student. While the main objective of the program is to prepare the student to function as a clinician, because of the nature of the profession he must be exposed to concepts of education, research and management.

The curriculum has three major components: human biology, the developmental process and interruptions to the process, and alternatives to dysfunction.

The human biology component serves as the basic structure from which the student derives knowledge and understanding of the body and its systems. The human development component serves to identify those aspects of most concern to occupational therapy and as a vehicle for analysis of the activities in which man engages at various ages and stages of life. Concurrently, disease and dysfunction in man is studied with the major emphasis on contemporary health problems and issues.

Laboratory, clinical and community experiences are utilized extensively throughout the curriculum to provide for active involvement of the student in his learning. Major emphases are on the social-cultural milieu of the community and examination of the development of the individual's capacities and roles in the family, school and community. The adaptation and modification of activities, design of adaptive equipment and devices, prosthetics and orthotics is included in the laboratory and field experiences.

A minimum of six months full-time field work experience is required. These placements begin the summer quarter following the junior year and continue throughout the senior year.

The final quarter of the senior year includes the study of special problems, principles of management, an independent study and an introduction to research design and methodology.

Junior Year

Fall Quarter		**Credit Hours**
*ANM 330	Basic Gross Anatomy	7
*PHY 311	Human Physiology	5
OTH 300	Occupational Therapy and the Community	4
OTH 301	Concepts in Development	2
OTH 303	Group Process	2
	Total	20

Winter Quarter		**Credit Hours**
*ANM 331	Basic Neuroanatomy	6
*PHY 312	Neurophysiology	5
OTH 310	Problems in Dysfunction	2
OTH 305	Developmental Process: Infancy through Adolescence	3
OTH 302	Principles of Occupational Therapy	3
	Total	19

Spring Quarter		
OTH 332	Kinesiology	4
OTH 307	Developmental Process: Adulthood through Aging	5
OTH 320	Problems in Dysfunction	2
OTH 304	Principles of Occupational Therapy II	5
	Total	16

Field Work Experience (June-July)

Years Total Credit Hours 55

Senior Year

Fall Quarter		**Credit Hours**
OTH 304a	Field Work Experience	8
OTH 400	Principles of Occupational Therapy III	8
	or	
OTH 410	Principles of Occupational Therapy IV	8
	Total	16

Winter Quarter		
OTH 400	Principles of Occupational Therapy III	8
	or	
OTH 410	Principles of Occupational Therapy IV	8
OTH 400a	Field Work Experience	8
	or	
OTH 410a	Field Work Experience	8
OTH 430	Research Design	3
	Total	19

Spring Quarter		
OTH 400a	Field Work Experience	8
	or	
OTH 410a	Field Work Experience	8
OTH 420	Special Problems	2
OTH 440	Independent Study	3
**MS 420	Management	3
	Total	16

Years Total Credit Hours 51

*See School of Medicine Course Description.
**See Health Systems and Information Sciences Course Descriptions.

Special Needs

Students who are accepted to the program must be prepared to travel to facilities throughout the Southeast United States to complete the full-time field work requirements in the senior year of study. Some travel may also be required to facilities in Georgia and South Carolina during the junior year. Financial assistance for these additional expenses cannot be guaranteed although every effort will be made to assist students with major financial problems.

Academic Promotion and Graduation

See the General Information section of this *Catalog* for academic probation and suspension policies.

All students must earn a "C" or better in each course, unless otherwise indicated, to continue in the professional program.

Opportunities

The registered occupational therapist works in neighborhood health centers, special schools, public health and other community agencies, nursing homes, general and special hospitals, clinics and rehabilitation centers as well as in private practice and in colleges and universities.

There is an acute shortage of registered occupational therapists. Thousands of positions at all levels are waiting to be filled and new positions are being created.

Masters of Health Education

The Department of Occupational Therapy provides an educational program at the graduate level to prepare participants for careers as a more highly skilled practitioner, clinical educator or academic education. Upon completion of requirements candidates are awarded the degree Masters of Health Education.

For details refer to School of Graduate Studies section of this *Catalog*.

Physical Therapy

Objectives

Physical Therapy is one of the allied health professions dedicated to the rehabilitation of handicapped individuals. As a member of the health team the physical therapist utilizes a variety of therapeutic measures to help the patient regain the maximum amount of function possible within the limits of his disability. The physical therapist must be able to determine the extent of functional loss then plan and implement an appropriate therapeutic program. Physical therapists must also be able to perform as administrators, researchers, consultants, and occasionally as educators. The physical therapist has completed a four year program leading to a Bachelor of Science in physical therapy.

The physical therapist assistant works within a physical therapy service administered by a professional physical therapist. The assistant functions as a physical therapy team member who contributes to total patient care by performing routine treatment procedures in accordance with planned programs, and by assisting the physical therapist in carrying out complex procedures and programs. He also carries out designated tasks which are required for the efficient operation of the physical therapy service. The physical therapist assistant performs his duties under the guidance and supervision of the physical therapist to whom he is directly responsible. The physical therapist assistant is a graduate of a two year program with an Associate of Science degree in physical therapy.

Accreditation

The Bachelor of Science degree program curriculum has been approved by the Council on Medical Education of the American Medical Association and of the American Physical Therapy Association. Graduates are eligible for the licensing examination required for the practice of physical therapy.

The Associate of Science degree program has been granted approval by the American Physical

Therapy Association. Graduates are eligible for the licensing examination required for the practice of physical therapy.

Bachelor of Science Degree

Admissions Requirements

Applicants may attend any accredited college or university of his choice for the freshman and sophomore years; however, all requirements of the Medical College of Georgia must be met. Preference will be given to those applicants who have demonstrated superior ability in all academic areas. In planning his course work for the first two years, the student should provide himself with a broad base of experiences to help him identify his areas of interest and competence as well as to give him a wide background to meet the varied challenges of modern society. Physical therapy is a profession which requires a knowledge of human behavior, physical and psychological, as well as a knowledge of man's history, literature, art, music, communicative skills, society past and present, economic problems, educational patterns and business methods. Prospective applicants are encouraged to contact the Department of Physical Therapy early in their academic careers to insure their completing the necessary prerequisites. Accepted students are admitted to the program at the beginning of fall quarter each year.

Specific Requirements

The Department of Physical Therapy encourages flexibility in meeting their requirements. In addition to the general admission requirements listed by the Medical College, School of Allied Health Sciences, the students are encouraged to take courses that interest them. Course work should include the following:

Area I—Humanities	**Credit Hours**
Composition	5
Literature	5
Humanities	10
Total	20

(Select from courses in art, creative writing, humanities, languages, literature, religion, journalism, and/or speech.)

Area II—Mathematics and Natural Sciences	**Credit Hours**
Mathematics	5

(Select courses from college algebra, trigonometry, pre-calculus, or advanced mathematics.)

Chemistry

(The chemistry requirement may be satisfied, if the student has a high school course in which C or better was earned. However, if the student had no high school chemistry, one college course with a laboratory will be required.)

Physics	10-15

(Select a minimum of two courses with laboratories covering mechanics and electricity. Other laboratory courses may include heat, light, sound, and magnetism.)

Biological Sciences	15

(Select laboratory courses only in general biology, microbiology, zoology (vertebrate preferred), comparative anatomy, embryology, and genetics. Only one botany course with laboratory accepted in this area.)

Total 30-40

Area III—Social Sciences	
History	5
Political Science (Government)	5
Psychology	10
Electives	10
Total	30

(Select courses from anthropology, criminology, geology, geography, economics, philosophy, psychology and sociology.)

Area IV—Major Area

Select from any areas of interest. Students are encouraged to take courses in a broad spectrum rather than concentrate all their efforts in the sciences.

Total 10

Application Procedures

Application forms with instructions for completing the admission procedure may be obtained

from the Office of Academic Admissions.

Applications should be submitted between September 1 and March 15 previous to anticipated enrollment. Early application is recommended. Applicants should submit a list of current and/or planned courses and credits. A transcript should be sent at the end of each quarter as it is completed. No application fee is required.

1. Applications must be filed no later than March 15; all procedures must be completed by April 1 of the year in which one is applying for admission in September.
2. The Department of Physical Therapy requires a personal interview as part of the application procedure. Due to the large number of qualified applicants, not all applicants are invited to interview. Interviews are scheduled monthly from January through March.
3. Applicants must have completed at least 90 quarter hours (60 semester hours) exclusive of physical education with a minimum grade point average (on a 4.0 system) of C (2.0) overall and C+ (2.5) in the sciences and mathematics.
4. A grade of D is not readily transferable and is accepted only at the discretion of the department.

Selection of applicants who meet admission requirements begins in April of each year. Applicants will be notified of the final action on their application in May.

Estimated Additional Expenses* Specific to Physical Therapy

Students who are accepted into the program must be prepared to travel to facilities throughout the United States to complete the internship requirements during the senior year of study.

Some travel will also be required to facilities in Georgia and South Carolina during the junior year.

	Junior Year	Senior Year
Books	$250.00	$ 120.00
Uniforms	100.00	40.00
Travel	100.00	1,100.00
Student Liability Insurance	15.00	15.00
Total	$465.00	$1,275.00

*Matriculation and other fees stated in General Information section.

Financial assistance for these additional expenses cannot be guaranteed although every effort will be made to assist students with major financial problems.

Financial Aid

In addition to the sources of financial aid available to all college students there are some sources available specifically for students enrolled in a physical therapy curriculum. For information on these sources contact: chairman, Department of Physical Therapy, Medical College of Georgia.

Curriculum

The curriculum covers the junior and senior years including the intervening summer leading to a Bachelor of Science degree with a major in physical therapy. A detailed study of normal human function, structures, and systems is followed by a study of the various pathological conditions which interfere with function and the medical, surgical and therapeutic procedures which are utilized to enable the patient to regain the maximum amount of function possible. Students are also introduced to basic research procedures, supervisory and management activities and educational systems in health care.

Classroom laboratory, clinical and independent study experiences are provided. The clinical facilities are selected to provide a broad base of experiences in a variety of settings.

Starting spring quarter in the junior year the curriculum is divided into a unit system rather than quarters. Therefore, students' time off is scheduled between units and may differ from that scheduled for the rest of the School of Allied Health Sciences. For the better understanding of this *Catalog,* however, the courses have been outlined in quarters.

Junior Year

Fall Quarter		Credit Hours
*AMN 330	Basic Gross Anatomy	7
*PHY 311	Principles of Human Physiology I	5
PTH 300	Dynamics of Human Function I	7
AHS 300a	Health Care Environment	3
	Total	22

Winter Quarter		
*AMN 331	Basic Neuroanatomy	6
*PHY 312	Principles of Human Physiology II	5
PTH 301	Dynamics of Human Function II	7
PTH 320	Clinical Experiences I	1
	Total	19

Spring Quarter		Credit Hours
PTH 310	Concepts of Dysfunction I (Units I, II)	15
PTH 340	Interpersonal Relations I	2
PTH 321	Clinical Experiences II	2
	Total	19

Summer Quarter		
PTH 410	Concepts of Dysfunction II (Units III, IV, V)	15
PTH 431	Community Health	5
PTH 322	Clinical Experience III	2
PTH 420	Clinical Experience IV	2
	Total	24
Years Total Credit Hours		84

*Refer to School of Medicine for Course Description.

Senior Year

Fall Quarter		Credit Hours
PTH 411	Concepts of Dysfunction II (Units VI, VII)	14
PTH 432	Designs for Administration	5
PTH 421	Clinical Experiences IV	2
	Total	21

Winter Quarter		
PTH 412	Concepts of Dysfunction IV (Units VIII, IX)	11
PTH 430	Research Methodology	5
PTH 440	Senior Project	2
PTH 422	Clinical Experiences V	6
	Total	24

Spring Quarter		
PTH 434	Learning Processes	5
PTH 441	Senior Project	5
PTH 442	Independent Study	5
PTH 433	Seminar	2
PTH 423	Clinical Experiences VI	6
	Total	23
Years Total Credit Hours		68

Academic Promotion and Graduation

Refer to General Information section of this *Catalog*.

Any student may be denied permission to continue enrollment in the Department of Physical Therapy if in the opinion of the faculty, the student's knowledge, character or mental or physical fitness cast grave doubts, upon his/her potential capacities as a physical therapist.

Associate of Science Degree

Admissions Requirements

Candidate for admission must meet the following requirements:

1. Have a high school diploma or equivalent. Individuals who did not graduate from high school may be considered for admission by presenting a State Department of Education Certificate of High School Equivalency. Satisfactory scores on the General Education Developmental Test and Scholastic Aptitude Test are also required.
2. Have a minimum score of 650 on the Scholastic Aptitude Test.
3. Have a minimum cumulative high school grade point that is equivalent to a C average, and must have a minimum of a C in all math and science courses.
4. Give evidence of satisfactory physical and mental capabilities to fulfill the role of a physical therapist assistant.

Application Procedures

Application forms and instructions should be obtained from the Office of Academic Admissions.

Applications should be submitted between January 1, and May 14 of the year of anticipated enrollment. High school transcripts should include the applicant's first semester of his senior year. Applicants should submit a list of courses and credits to be taken for graduation. A complete transcript and evidence of graduation is required prior to admission. No application fee is required.

1. Applications must be filed no later than May 15 of the year in which one is applying for admission in August.
2. A personal interview with members of the department will be scheduled for the prospective student after application and transcripts have been filed. Early scheduling of interviews is recommended.
3. A grade of D is not readily transferable and is accepted only at the discretion of the department.

Class size is limited and not all applicants who meet minimum admission requirements may be selected. Selection of applicants begins in May of each year.

Estimated Additional Expenses* Specific to Physical Therapy

Students who are accepted into the program must be prepared to travel to facilities throughout the United States to complete the clinical practicum requirements during the sophomore year of study. Some travel will also be required to facilities in Georgia and South Carolina during the freshman year.

	Freshman Yr.	Sophomore Yr.
Books	$250.00	$ 250.00
Uniforms	100.00	40.00
Travel	100.00	800.00
Student Liability Insurance	15.00	15.00
Total	$465.00	$1,105.00

*Matriculation and other fees stated in General Information section.

Financial assistance for these additional expenses cannot be guaranteed although every effort will be made to assist students with major financial problems.

Curriculum

At the Medical College of Georgia, physical therapist assistants' education involves a two year course of study. Entering students will participate in a special short term physical therapy introduction unit prior to the fall quarter of their freshman year.

The curriculum covers the freshman and sophomore years including the intervening summer leading to an Associate of Science degree with a major in physical therapy. It contains a blend of general education and physical therapy courses which are designed to promote the individual's technical competence and personal growth.

Students in the program may obtain their general education requirements locally at Augusta College, or they may obtain them at another accredited college or university and transfer the credits to the program at the Medical College.

The curriculum has been planned in accordance with the standards for physical therapist assistant education as established by the American Physical Therapy Association.

Starting the summer quarter prior to the sophomore year the curriculum is divided into a unit system rather than quarters. Therefore, students' time off is scheduled between units and may differ from that scheduled for the rest of the School of Allied Health Sciences. For the better understanding of this *Catalog* however, the courses have been outlined in quarters.

Freshman Year

*Summer Quarter		Credit Hours
PTA 101	Introduction to Physical Therapy	5
Fall Quarter		
PTA 105	Functional Anatomy I	5
**HIS 212	American History II	5
**PSY 101	Principles of Psychology	5
	Total	15
Winter Quarter		
PTA 105	Functional Anatomy II	5
**ENG 101	College Composition I	5
**PSC 101	Physical Science I	5
	Total	15
Spring Quarter		
†PHY 210	Introductory Human Physiology	5
**POL 101	American Government I	5
PTA 130	The Helping Relationship	2
PTA 120	Topics in Physical Therapy I	3
PTA 140	Clinical Practicum I	1
	Total	16
Years Total Credit Hours		50

*This is a special unit constructed to meet specific student needs and does not run for the full summer quarter.
**See Augusta College Catalog for course description.
†See School of Medicine for course description.

Sophomore Year

Summer Quarter		Credit Hours
PTA 220	Topics in Physical Therapy II	5
PTA 240	Clinical Practicum II	2
	Total	7
Fall Quarter		
PTA 221	Topics in Physical Therapy III	13
PTA 241	Clinical Practicum III	2
	Total	15
Winter Quarter		
PTA 222	Topics in Physical Therapy IV	8
PTA 242	Clinical Practicum IV	4
PTA 230	Studies in Management	5
	Total	17

Spring Quarter		Credit Hours
PTA 223	Topics in Physical Therapy V	8
PTA 243	Clinical Practicum V	6
PTA 231	Health Care Issues	5
	Total	19
Years Total Credit Hours		58

Academic Promotion and Graduation

Refer to General Information section of the *Catalog*.

Any student may be denied permission to continue enrollment in the Department of Physical Therapy if in the opinion of the faculty, the student's knowledge, character or mental or physical fitness cast grave doubts upon his/her potential capacities as a physical therapist assistant.

Physician's Assistants

General

The Physician's Assistants program was established as a department of the School of Allied Health Sciences, Medical College of Georgia in 1972. The first class was enrolled in January 1973. Since that time, classes have been enrolled each year concurrent with the fall quarter schedule of the School of Allied Health Sciences, Medical College of Georgia. The first class was graduated in December 1974.

The status of the Physician's Assistants has been given legal definition and acceptance in the Georgia State Code, H.B. 1591 and 1592.

Objectives

The physician's assistants department at the Medical College of Georgia has as its objective the education of new health professionals to assist the physician engaged in primary health care.

Primary care implies the physician's practice is made up to a significant degree of office or outpatient care and is comprehensive in scope. Such physicians might be found in clinics or solo practice, both rural and urban.

Accreditation

The Physician's Assistants program has been approved by the Council on Medical Education of the American Medical Association and the Association of Physician's Assistant Programs.

Admission Requirements

Personal, physical, and academic requirements of the Medical College of Georgia must be met by candidates seeking entry to the physician's assistants program.

Previous medical experience is desirable, but it is not a requirement.

The following specific requirements must be met by all candidates for admission:

1. Have a minimum score of 650 on the Scholastic Aptitude Test.
2. Have ninety quarter hours of transferable college credits from accredited institutions with a minimum of a C average, exclusive of physical education.
3. The ninety quarter hours should include the following:

Area I—Humanities	Quarter Hours
English (to include composition)	10
Humanities	10
Suggested courses for Humanities: humanities, art, music, literature, philosophy, speech, foreign language, study or religions.	
Total	20

Area II—Natural Sciences	
Chemistry	10
Mathematics (Algebra)	5
Electives	5
Suggested electives: zoology, anatomy, physiology, comparative anatomy, genetics, histology, microbiology, organic chemistry, biochemistry, physics.	
Total	20

Area III—Social Sciences	
*American History	5
*United States Constitution	5
Growth and Development	5
Electives	5
Suggested electives: psychology, sociology, history, geography.	
Total	20

Area IV—Major Field

Suggested courses: Courses listed in Area II under "suggested electives" are strongly recommended.

Other courses: psychology of behavior, mental health, communication skills, counseling.

Total 30

*These courses must satisfy the Georgia legislative requirements. The State of Georgia requires that any student receiving a degree from any institution in the University System will have demonstrated a proficiency in United States and Georgia Constitution and History. Exemption examinations may be taken by both in- and out-of-state students; however, no credit hours are earned. Electives may be substituted for these courses if these requirements have been met by the exemption examination.

Application Procedures

Application forms with instructions for completing the admission procedure may be obtained from the Office of Academic Admissions, Medical College of Georgia, Augusta, Georgia, 30901.

Applications should be submitted no earlier than September 1 and no later than March 15 previous to anticipated enrollment. Students are enrolled during the fall quarter only. All college work must be completed prior to admission. (Exceptions must be approved by departmental chairperson.)

Interview appointments are scheduled by the Department of Physician's Assistants. A personal interview is required.

Estimated Additional Expenses Specific to Physician's Assistants

	First Year	Second Year
Books and Supplies	$325.00	$350.00
Uniforms and Instruments	330.00	———
Travel	———	100.00
Total	$655.00	$450.00

Matriculation and other fees are stated in the General Information section in *Catalog*.

Financial Aid

See General Information in *Catalog*.

Curriculum

The curriculum of the Physician's Assistants Program at the Medical College of Georgia is presented during 24 consecutive months. After successful completion of the program, the student is awarded a Bachelor of Science degree as a physician's assistant.

The curriculum is presented in three phases:

Phase I—Classes conducted on the campus of the Medical College of Georgia.

Fall Quarter		Quarter Hours
*PHY 311	Physiology	5
*ANM 330	Anatomy	7
PAD 308	Physical Diagnosis	5
*CMB 244	Survey of Inorganic and Organic Chemistry	5
	Total	22

Winter Quarter		
*PHY 312	Physiology	5
*CMB 345	Biochemistry (includes 1 hr. per week correlation lecture by PA Staff)	5
*ANM 331	Neuroanatomy (includes 1 hr. per week correlation lecture by PA Staff)	7
PAD 310	Physical Diagnosis	5
	Total	22

Spring Quarter		
*CMB 335	Microbiology	5
*PHM 303	Pharmacology	5
PAD 332	Diagnostic Specialty Techniques	5
PAD 314	Laboratory Medicine	3
PAD 347	Growth and Development	3
PAD 335	Introduction to Minor Surgical Techniques	3
	Total	24

*See School of Medicine for Course Description.

Phase II—Summer Quarter of first year through Spring Quarter of second year.

Clinical Rotations Required	Length	Credit Hours
PAD 409 Clinical Laboratory	2 weeks	4
PAD 405 Pediatrics	6 weeks	12
PAD 406 Ob-Gyn	6 weeks	12
PAD 420 Emergency Room	4 weeks	9
PAD 418 Surgery	6 weeks	12
PAD 407 Mental Health	4 weeks	9
PAD 404 Internal Medicine	6 weeks	12
PAD 403 Family Practice	6 weeks	12
PADE___ Elective	4 weeks	9
PADE___ Elective	4 weeks	9
	Total	100

Phase III

Summer Quarter	Length	Credit Hours
PAD 401 Preceptorship	10 weeks	20
	Total	20

Academic Promotion and Graduation

See General Information in *Catalog*.

Student Needs

Students must be prepared to travel during Phase II of the curriculum.

PA Graduate

The practicing physician's assistant in the State of Georgia is certified by the Composite Board of Medical Examiners. A job description written by the PA's physician employer is submitted to the Composite Board of Medical Examiners for approval. After approval of the job description, the PA and the physician employer must appear before the board.

The PA functions under the guidelines of the approved "job description." There is no model "job description," but most include collection of patient data, by the usual methods of history taking, physical examination and basic laboratory tests; stating the patient's problem; implementing appropriate portions of the plan of treatment and follow up. As the physician's assistant progresses, his job description may be amended or "updated."

By successful completion of a written and practical examination, conducted by the National Board of Medical Examiners, the physician's assistant receives certification by the National Commission on Certification of Physician's Assistants.

Radiologic Technologies

General

Radiologic Technologists assist physicians who specialize in the use of x-radiation and other forms of ionizing radiation to diagnose and treat diseases and injuries. There are three major areas in which a radiologic technologist can be certified: diagnostic radiologic technology, nuclear medicine technology and radiation therapy technology. All three fields of study are available at the Medical College of Georgia.

The diagnostic radiologic technologist is responsible for the production of consistently high quality radiographs, ready for the radiologists's medical interpretation. This duty requires a comprehensive knowledge of anatomy, geometric principles and positioning techniques for all types of radiographic examinations. Skilled diagnostic radiologic technologists assist the radiologist in examining the patient for broken bones, ulcers, tumors, diseases or malfunction of various organs.

The radiologic technologist must be competent in understanding and applying the principles of (a) radiographic exposure and processing, (b) x-ray equipment testing and the reporting of faults, (c) departmental administrative procedures and most important (d) in applying precautions against over irradiation of patients and personnel.

In addition, the radiologic technologist is responsible for the physical and mental well-being of the patient during the radiographic examination.

The nuclear medicine technologist is a highly skilled individual who has a firm educational background in mathematics, chemistry, physics, radiation safety, clinical nuclear instrumentation, laboratory techniques, and anatomy and physiology. Under the supervision of a physician, the technologist either directs or participates in the daily operation of the department. The responsibilities are varied and may include: radiation safety, quality control, radiopharmaceutical preparations and administration, operation of clinical nuclear instruments, positioning of patients for imaging procedures, collecting and preparing biologic specimens, conducting laboratory studies on the biologic specimens and preparing the data for the physician's interpretation.

The increasing demand for additional nuclear medicine services has provided technologists with job opportunities in large and small hospitals, both public and private. There are opportunities in Veteran's Administration hospitals, public health institutions and national research institutes.

The radiation therapy technologist acts as technical assistant to the radiologist in special procedures involving use of radiation-producing equipment in treating disease. A certified radiation therapy technologist is qualified to work in any of the major cancer treatment centers or other large hospitals having both x-ray diagnostic equipment and high-energy radiation units for therapy.

A radiation therapy technologist assists the radiologist in treating the patient by exposing diseased areas of the body to x-rays or other forms of high energy radiation. The technologist is also responsible for the safety of patients and personnel, and for keeping treatment records.

Accreditation

The Radiologic Technologies programs are approved by:

The Board of Regents of the University System of Georgia

The Council on Medical Education of the American Medical Association

The Joint Review Committee on Education in Radiologic Technology

The American College of Radiology and its Commission on Technologists Affairs

The American Registry of Radiologic Technologists

The Nuclear Medicine Registry of the American Society of Clinical Pathologists

Admission Requirements

The general requirements for admission are set out in the General Information section of this *Catalog*. Candidates for all programs are required to have graduated from an accredited high school or equivalent. Excellent physical and mental health are required. A strong sense of social-personal concern, and a high moral and ethical character are desirable. Preference will be given to those applicants who have demonstrated satisfactory academic ability, particularly in the area of science and math. Additional requirements are listed with each of the programs offered within the department.

Application Procedures

Application must be made through the Office of Academic Admissions. To assure consideration for the following September, applications should be completed by the end of February.

Refer to the General Information section of the *Catalog* for additional information.

Estimated Fees and Expenses

See the General Information section for facts regarding tuition and fees. Books and supplies average about $100 per year. Uniforms average about $100 the first year and $25 in subsequent years.

Information regarding financial aid may be found in the General Information section of the *Catalog*.

Programs

The following courses of study are available through the Department of Radiologic Technologies:

Associate of Science Degree in Radiologic Technology

Bachelor of Science Degree in Radiologic Technology

Certificate in Nuclear Medicine Technology

Bachelor of Science Degree in Nuclear Medicine Technology

Certificate in Radiation Therapy Technology

Registry Requirement

For students to meet the American Registry of Radiologic Technologists' requirement of 2150 hours and the requirement for graduation, students must attend clinical practicums Spring and Summer Quarter for their second year. The clinical practicum is based on a forty hour week.

Curriculum

Associate of Science Degree—Radiologic Technology

The 24-month course of study qualifies the student to take the certification examination of the American Registry of Radiologic Technologists and leads to an AS degree in radiologic technology. This program is open to high school graduates, with or without previous college credits.

Fall 1:		**Credit Hours**
RAD 100	Survey of Radiologic Technology (including supervised clinical orientation)	2
*Augusta College	College Composition I	5
*Augusta College	Physical Science I	5
*Augusta College	Freshman Mathematics	5

Winter 1:		**Credit Hours**
RAD 111	Radiographic Anatomy and Positioning (inc. lab)	4
RAD 113	Radiographic Technique	3
RAD 121	Medical Aspects of Radiologic Technology	2
RAD 123	Radiologic Pathology	1
RAD 131	Radiologic Physics	2
RAD 141	Clinical Practicum (8:00-12:00)	5
Spring 1:		
RAD 112	Radiographic Anatomy and Positioning (inc. lab)	4
RAD 114	Radiographic Technique	3
RAD 115	Special Topics	2
RAD 124	Radiologic Pathology	1
RAD 132	Radiologic Physics	2
RAD 142	Clinical Practicum (12:30-4:30)	5
Summer 1:		
RAD 143	Clinical Practicum (afternoon)	4
*Augusta College	College Composition II	5
*Augusta College	American Government	5
*Augusta College	United States History	5
Fall 2:		
RAD 211	Radiographic Anatomy	2
RAD 212	Special Procedures (inc. lab)	2
RAD 215	Film Critique	3
RAD 223	Radiologic Pathology	1
RAD 241	Clinical Practicum (10:00-5:00)	8
Winter 2:		
RAD 224	Correlative Diagnostic Techniques	3
RAD 231	Radiologic Engineering and Special Topics in Radiologic Physics	2
RAD 242	Clinical Practicum	10
Spring 2:		
RAD 243	Clinical Practicum Registry Review	Cr
Summer 2:		
RAD 244	Clinical Practicum Registry Review	Cr

*Students having obtained credits in the liberal arts courses required for the AS degree program before admission to the program will be given a special schedule for Fall 1 and Summer 1 terms.

Bachelor of Science Degree—Radiologic Technology

A program leading to a BS degree for radiologic technologists with or without previous college credit is offered. The length of the program depends on the amount of previous credit earned. Upon departmental approval, a validation exam is given, and if acceptable scores are made, certain college credit is granted as compensation for radiologic technology training programs from institutions not granting credit for their programs.

The following liberal arts credits are required of the student seeking a baccalaureate degree in Radiologic Technology. These courses should be completed before the student enters the senior year of the curriculum.

Area I—Humanities	**Credit Hours**
English Composition	10
Literature	5
Electives	5
Total	20
Area II—Mathematics and Science	
Math (Algebra and Trig)	10
A two-course sequence in Biology, Chemistry or Physics	10
Total	20
Area III—Social Science	
*American History	5
*Political Science	5
Electives	10
Total	20
Area IV—Major Area	
A course in Biology, Chemistry, or Physics	5
Educational Psychology	5
Social Science Electives	10
**Anatomy and Physiology	10
Total	30

*Electives may be substituted for these courses if their requirements have been met by the exemption examination on the History and Constitution of the United States and Georgia.

**May be obtained at MCG during Senior Year.

Senior Year—Major Curriculum

Fall Quarter		**Credit Hours**
RAD 411	Seminar in Advanced Radiographic Technique	2
RAD 421	Radiology Equipment	5
RAD 431	Advanced Radiologic Physics	2
RAD 441	Clinical Practicum	5
RAD 461	Radiology Management	1

Winter Quarter		Credit Hours
RAD 412	Introduction to Quality Assurance	1
RAD 422	Radiation Detection Instrumentation	5
RAD 432	Advanced Radiologic Physics	2
RAD 442	Clinical Practicum	5
RAD 462	Radiology Management	1
RAD 402	Survey of Medical Technology	1

Spring Quarter		
RAD 413	Principles of Teaching	1
RAD 423	Selected Topics	5
RAD 433	Advanced Radiologic Physics	2
RAD 443	Clinical Practicum	5
RAD 463	Radiology Management	1
RAD 403	Radiobiology	1

Credit Hours for the Program:

Liberal Arts	90 qtr. hrs.
Validation or Transfer from AS Degree	45 qtr. hrs.
Senior Year—Major Curriculum	45 qtr. hrs.

Certificate—Nuclear Medicine Technology

The 12-month curriculum in nuclear medicine technology is open to registered radiologic technologists, registered medical technologists, registered nurses or suitably prepared persons with bachelor's degrees. This program is designed for the technologist who primarily performs imaging procedures. Graduates are eligible for both of the certification exams listed under the BS-NMT degree.

Fall Quarter		Credit Hours
PCS 331	Basic Physics of Nuclear Medicine	4
PCS 321	Electrical Fundamentals	1
NMT 301	Introduction to Nuclear Medicine Technology	1
NMT 311	In Vivo Nuclear Medicine Technology	4
NMT 341	Clinical Practicum	5

Winter Quarter		
PCS 332	Physics of Nuclear Medicine	5
NMT 302	Seminar	1
NMT 312	In Vivo Nuclear Medicine Technology	4
NMT 342	Clinical Practicum	5

Spring Quarter		
PCS 333	Physics of Nuclear Medicine	3
PCS 323	Computer Programming	2
NMT 313	Radiochemistry	4
RAD 403	Radiobiology	1
NMT 343	Clinical Practicum	5

Summer Quarter		
NMT 344	Clinical Practicum	5
	Total Hours	50

Bachelor of Science—Nuclear Medicine Technology

A BS degree in Nuclear Medicine Technology may be awarded after the student has acquired 90 quarter hours of liberal arts credit and has completed a 21-month program in nuclear medicine technology.

Basic liberal arts requirements are outlined below:

Area I—Humanities	Credit Hours
Basic Grammar and Composition	5
Literature	5
Electives	10
Area II—Mathematics and Natural Sciences	
Math (including pre-calculus)	10
2 Course Sequence in Biology	10
Area III—Social Science	
*History	5
*Political Science-Government	5
Electives	10
Area IV—Major Area	
Chemistry—including General, Qualitative, Quantitative, Analytical or Organic	10
Chemistry, Physics, Physical Science, or Math	10
Anatomy and Physiology	10
Total Hours	90

*Electives may be substituted for these courses if their requirements have been met by the exemption on the History and Constitution of the United States and Georgia.

The junior year will consist of the courses outlined under Certificate—Nuclear Medicine Technology above with the following exception: MRA 401 instead of NMT 313.

The senior year courses are as follows:

Fall Quarter		Credit Hours
PCS 431	Clinical Data Processing	5
NMT 411	Radiochemistry Laboratory Procedures	4
NMT 441	Clinical Practicum	5
RAD 403	Radiobiology	1

Winter Quarter		Credit Hours
PCS 432	Electronics	5
NMT 412	Radiopharmacy (Elective)	5
NMT 422	Selected Topics (Elective)	2-5
NMT 442	Clinical Practicum	5
Spring Quarter		
PCS 433	Selected Topics	5
UST 400	Introduction to Ultrasound (Elective)	2
NMT 463	Education and Administration	5
RAD 453	Survey of Allied Diagnostic Technologies (Elective)	2-5
NMT 443	Clinical Practicum	5
	Total Hours	45

Certificate—Radiation Therapy Technology

This 12-month program is open to radiologic technologists, registered nurses, or nuclear medicine technologists. The student will be prepared to take the American Registry of Radiologic Technologists National Examination in Radiation Therapy.

Fall Quarter		Credit Hours
RDT 311	Principles of Oncology	5
RDT 341	Radiation Therapy Technology	5
*ANM 310	Anatomy	5
Winter Quarter		
RDT 312	Principles of Oncology	5
RDT 342	Radiation Therapy Technology	5
*PHY 210	Physiology	5
Spring Quarter		
RDT 313	Principles of Oncology	5
RDT 343	Radiation Therapy Technology	5
RAD 423	Physics of Radiation Therapy	5
RAD 403	Radiobiology	1

*See School of Medicine Course Descriptions.

Requirements for Graduation

The General Information section contains requirements for graduation. The faculty of the Department of Radiologic Technologies makes recommendations for graduation based upon a student's ability to develop those qualities considered essential for the profession.

Respiratory Therapy

Objectives

Respiratory therapy is an allied health specialty employed in the treatment, management, control and care of patients with deficiencies and abnormalities associated with respiration.

It shall mean the therapeutic use of medical gases, air, and oxygen-administering apparatus, environmental control systems, humidification and aerosols, drugs and medications, ventilatory assistance and ventilatory control, postural drainage, chest physiotherapy, breathing exercises, respiratory rehabilitation, the assistance with cardiopulmonary resuscitation, and maintenance of natural and prosthetic airways.

Specific techniques can be employed in respiratory therapy to assist in diagnosis, monitoring, treatment and research. This shall be understood to include measurement of ventilatory volumes, pressures, flow rates and blood gas analyses.

Since respiratory therapy as a special health area is broadly defined and parallels closely other professional areas, it is important to realize that such therapy does interrelate in patient care performed by nurses, physical therapists and other technologists.

The proper management and education of the respiratory therapy worker is a common duty of the respiratory therapist.

The promotion, planning and implementation of varied types of research for the benefit of the public and the patient, as well as the growth of the profession, is often performed by respiratory therapists.

Opportunities

The Registered Respiratory Therapist (R.R.T.) works in hospitals, clinics, laboratories, colleges and universities. Employment also exists within commercial companies in sales and contract service. The registered therapist may choose to work strictly as a clinician, or perhaps in other areas such as management, education or research within his field.

There is currently an acute shortage of registered therapists. As of 1977, there are less than 4,500 registered therapists in a profession of some 60,000 respiratory therapy practitioners. These individuals assume the majority of the job functions and have increased responsibility and salary.

Estimated Expenses* Specific to Respiratory Therapy

	Junior Year	Senior Year
Books	$ 200.00	$ 175.00
Instruments	25.00	15.00
Uniforms	50.00	25.00
Field Trips	100.00	350.00
Total	$ 375.00	$ 565.00

	Junior Year	Senior Year
On-campus Housing	$ 390.00	$ 520.00
Food	600.00	800.00
Personal	450.00	600.00
Grand Total	$1,815.00	$2,485.00

*See General Information for tuition and fees.

Special Needs

Students who are accepted into the program must be prepared to travel to facilities throughout the southeastern United States to complete the clinical practice requirements in the senior year of study. Some travel may also be required to facilities in Georgia and South Carolina during the junior year. Financial assistance for these additional expenses cannot be guaranteed, although every effort will be made to assist students with major financial problems.

Admission Requirements

Applicants may transfer to the Medical College following completion of the freshman and sophomore years with a minimum of 90 quarter hours of course work, exclusive of physical education. Applicants are encouraged to apply in the fall of the year prior to the year of admission. All general education core requirements must be met prior to transfer. A minimum grade point average of 2.0 (C) overall, and a 2.5 (C+) in math and science is required for consideration for admission. Course work should include the following:

Area I—Humanities	Quarter Hours
*Composition	5
*Literature	5
*Humanities	10
Selections should be made from courses in art, creative writing, humanities, languages, literature, religion, journalism, and/or speech.	
Total	20

Area II—Natural Sciences	Quarter Hours
*Mathematics	5-10
Selections should be made from courses in college algebra, trigonometry, precalculus or advanced mathematics.	
Chemistry	10-15
Selections should be made from laboratory courses only, must have exposure to inorganic and organic chemistry.	
Physics	5-10
Selections should be made from laboratory courses only in mechanics, heat, light, sound, electricity and magenetism. Students must have an understanding of the gas laws.	
Biological Sciences	15
Selections should be made from laboratory courses only in general biology, microbiology, zoology (vertebrate preferred), comparative anatomy, embryology and genetics.	
Total	35-50

Area III—Social Sciences	
*History	5
*Political Science (Government)	5
*Psychology	10
*Electives	10
Total	30

Electives

Selections may be made from any areas of interest. The Department of Respiratory Therapy encourages flexibility in meeting admission requirements. Students are encouraged to take courses in a broad spectrum rather than concentrate all their efforts in the sciences.

*Meets University of Georgia System Core Requirements.

Application Procedures

Application forms for completing the admission procedures may be obtained from the Office of Academic Admissions, Medical College of Georgia, Augusta, Georgia 30901. Applicants are responsible for gathering the necessary information to complete the application folder. A personal interview is required as part of the application process and should be scheduled after the initial application and transcript have been filed. All applications must be filed by March 15, and all procedures, including the personal interview, must be completed by April 1st of the year that one is

seeking admission in September. Applications received after this time will be considered only on a space-available basis.

Financial Aid

In addition to the sources of financial aid available to all college students, there are some sources available specifically for students enrolled in a respiratory therapy curriculum. For information on these sources contact: Chairman, Department of Respiratory Therapy, Medical College of Georgia.

Curriculum

The respiratory therapy curriculum involves a two-year (eight-quarter) course of study after completion of the first two years at an accredited college of the student's choice. The course covers the junior and senior years only and leads to a Bachelor of Science degree with a major in respiratory therapy. Upon successful completion of the curriculum, the graduate is recommended to sit for the National Registration Exams offered by the National Board for Respiratory Therapy.

The respiratory therapy curriculum is designed as a continuum of learning experiences organized to promote the personal and professional growth of the student. The main objective of the program is to prepare the student to function as a clinician. However, the diversity of the profession warrants exposure of the student to education, research methodology and management practices.

The curriculum is divided into three components: the basic sciences, professional didactic concepts and methodology, and practical clinical experiences.

The basic sciences include human anatomy, microbiology, physiology, biochemistry, medical terminology, pharmacology and a study of diseases of the heart and lungs.

The professional course work is a structured study of the principles and practices of respiratory care. The course of study progresses to instruction in advanced techniques used to detect and treat respiratory disorders.

The clinical practicum portion of the curriculum consists of the actual application of the various techniques used for the evaluation and treatment of the patient. The relationship of the therapist to the patient and other health-care workers is also stressed.

During the summer quarters, opportunities exist to study the principles of management, education or research. The last quarter of the senior year offers the chance for additional clinical experience in any area in the profession of special interest to the student.

Junior Year

Fall Quarter		Credit Hours
*MRA 301	Medical Terminology	3
**ANM 330	Human Systemic Anatomy	7
**PHY 311	Principles of Human Physiology	5
RTH 301	Respiratory Therapy Orientation	7
	Total	22

Winter Quarter		
**ANM 331	Basic Neuroanatomy	6
**PHY 312	Neurophysiology	5
RTH 300	Clinical Practicum I	8
RHT 304	Cardiopulmonary Resuscitation	2
RTH 305	Basic Respiratory Therapy Appliances and Modalities	5
	Total	26

Spring Quarter		
PHM 301	Undergraduate Pharmacology	5
RTH 310	Cardiopulmonary Pathophysiology	4
RTH 302	Clinical Practicum II	8
**MIB 310	Introductory Microbiology	5
	Total	22

Summer Quarter		
RTH 312	Library Research I	2
PTH 402	Chest Therapy for Respiratory Therapist	2
RTH 405	Ventilation, Quantitation and Clinical Evaluation	3
RTH 407	Methods of Ventilatory Alteration	4
RTH 410	Intensive Respiratory Care	4
	Total	15

Senior Year

Fall Quarter		Credit Hours
RTH 402	Clinical Practicum III	8
†HS 450	Elementary Medical Statistics	3
RTH 414	Respiratory Therapy Pharmacology	1
RTH 417	Newborn and Pediatric Respiratory Care	4
ELECTIVES	Education, Management, Research	5
	Total	21

Winter Quarter		Credit Hours
RTH 404	Clinical Practicum IV	8
†HS 461	Electronics for Allied Health Scientists	3
RTH 412	Pulmonary Functions	3
RTH 424	Library Research II	2
ELECTIVES	Education, Management, Research	5
	Total	21

Spring Quarter		
RTH 409	Advanced Respiratory Therapy	2
AHS 400	Survey of Education	3
†HS 410	Departmental System Management Techniques	3
RTH 406	Clinical Practicum V	8
RTH 420	Respiratory Therapy Community Service	1
RTH 303	Independent Study	3
	Total	20

Summer Quarter		
RTH 408	Special Clinical Rotation	20
RTH 450	Respiratory Therapy Seminar	2
	Total	22

*See Medical Record Administration Course Descriptions.
**See School of Medicine Course Descriptions.
†See Health Systems and Information Sciences Course Descriptions.

Course Descriptions

Associated Dental Sciences

B. Pollard, Chairperson; J. Brown; M. Cannon; M. Damon; H. Rackley; D. Van Horn; W. Williams; G. Winkley.

*Dental Hygiene

DH 100-300. Pre-Clinical Dental Hygiene. (0-8-3 hours)
DH 101-301. Clinical Dental Hygiene. (0-8-3 hours)
DH 102-302. Clinical Dental Hygiene. (0-8-3 hours)
Prerequisite: Dental Hygiene student

These courses provide the student with the opportunity to gain knowledge and skills in the delivery of patient care for which the dental hygienist is responsible. Emphasis is placed on comprehensive oral disease control. Each quarter offers the student the opportunity for patient involvement in the Dental Hygiene Clinic.

DH 120-320. Oral and Dental Anatomy. (1-6-3 hours)
Prerequisite: Dental Hygiene student

A study of the growth and development of the human dentition, dental terminology and tooth morphology. Laboratory exercises using drawings and wax-on technique provide training in precision motor skills, introduction to manipulation of certain dental materials and introduction to three-dimensional conceptual perception.

DH 110-310. Introduction to Patient Care. (2-0-2 hours)
DH 111-311. Dental Hygiene Lecture. (2-0-2 hours)
Prerequisite: Dental Hygiene student

An introduction to the fundamental concepts, principles, and skills essential to rendering comprehensive oral hygiene care. Numbering among the topics for discussion are the medical-dental history, oral inspection, aseptic techniques, patient education, and hard and soft deposits. Practical experience in applying the principles and skills learned in these courses is provided in DH 100,300 as well as DH 101,301. Throughout, total patient care and prevention are emphasized.

DH 112-312. Dental Hygiene Lecture. (2-0-2 hours)
Prerequisite: DH 111,311

Review of the procedures and objectives for providing total patient care. Discussions center upon (1) the problems presented by patients with special needs and (2) the treatment modifications and additional services needed to bring these patients to a state of optimum oral health.

DH 122-322. Introduction to Dental Specialties. (1-3-2 hours)
Prerequisite: Dental Hygiene student

This course introduces the dental hygiene student to the various areas of specialized practice in dentistry as well as the different kinds of materials and instruments which are utilized in each area. The laboratory gives the student an opportunity for those areas of dentistry as they are used.

DH 241-441. Introduction to Public Health. (4-0-4 hours)
Prerequisite: Dental Hygiene student

The history, philosophy and organization of public health are presented. The relationship of public health to dentistry is explored. Sociological determinants of public health programs are identified. Epidemiological studies will be reviewed prior to field application. The scope and dental relevance of public health are illustrated by examples of local, state, national and international programs.

DH 123-323. Intramural Clinics. (0-3-1 hours)
DH 223-423. Intramural Clinics. (0-3-1 hours)
Prerequisite: Dental Hygiene student

Dental Hygiene students are scheduled in each clinical area of specialized dentistry within the dental school to provide an opportunity to utilize the techniques presented in the course, Introduction to Dental Specialities and Materials.

DH 200-400. Dental Hygiene Clinic. (0-12-4 hours)
DH 201-401. Dental Hygiene Clinic. (0-12-3 hours)
DH 202-402. Dental Hygiene Clinic. (0-12-4 hours)
Prerequisite: Dental Hygiene student

These courses are continuation of the first year dental hygiene clinic courses. Opportunity is afforded the student to expand both knowledge and technique. The development and practice of skills necessary in the treatment and prevention of oral disease is emphasized.

DH 250-450. Introduction to Educational Media. **(2-0-2 hours)**
Prerequisite: Dental Hygiene student
A survey of audio-visual media as effective means for achieving educational objectives. Emphasizes selection and use of both commercially available and simple locally produced instructional materials in a large group or individual communication interaction.

DH 243-443. Preventive Dentistry. **(1-0-1 hour)**
Prerequisite: Dental Hygiene student
Emphasis is placed on the design and application of personalized comprehensive preventive measures. The course includes instruction in the use of various caries susceptibility tests and other elements useful in facilitating a preventive program.

DH 242-442. Public Health Field Experience. **(2-6-4 hours)**
Prerequisite: Dental Hygiene student
Using the techniques of group processes, the student designs, plans, prepares, presents and evaluates dental health education programs for a community and for a selected hospital. Living in a rural community during the week of program presentation is required. The student is advised that additional expenses incurred will be approximately $100.00. The Georgia Department of Human Resources and the United States Veterans Administration cooperates in the provisions of the field experiences.

DH 240-440. Preventive Dentistry. **(1-0-1 hour)**
Prerequisite: Dental Hygiene student
For course description, refer to School of Dentistry OBIO 523 Advanced Cariology.

DH 210-410. Ethics, Jurisprudence and Practice. **(2-0-2 hours)**
Prerequisite: Dental Hygiene student
In preparation for graduation and entry into community and professional life, discussions will be held concerning dental hygiene, state board examinations, state practice acts, employment, private practice environments, legal situations, ethical codes of conduct, business procedures and professional organizations.

DH 444. Community Dental Health I. **(3-0-3 hours)**
DH 445. Community Dental Health II. **(3-0-3 hours)**
Prerequisite: Public Health Tract Dental Health student
This seminar is designed to provide the student with a broad based understanding of the health delivery system in the United States to include: funds, facilities, manpower, laws/regulations, and patients. Emphasis is placed on: organizational and structural characteristics of the system; problems/criticisms of the health delivery system; health legislation, regulation, and planning; health financing; key interrelationships between the public and private sector; and future trends in health delivery.

DH 446. Community Dental Health III. **(3-12-8 hours)**
Prerequisite: Public Health Tract Dental Hygiene student
An opportunity to integrate knowledge and experience will be provided by completing a need assessment study design and/or evaluation of a community dental health problem. Off campus experience; seminars and student presentations will augment individual student projects.

DH 454. Educational Psychology. **(3-0-3 hours)**
Prerequisite: Education Tract Dental Hygiene student
A survey course including background of American education, learning theories, human growth and development, psychology applied to teaching, education evaluation, and psychology of teaching applied to Dental Hygiene.

DH 458. Educational Tests and Measurements. **(3-0-3 hours)**
Prerequisite: Education Tract Dental Hygiene student
The purpose of the course is to give students the knowledge necessary to construct classroom tests that are valid and reliable. Course lectures include material on the history, functions, and criticisms of testing; writing behavioral objectives; relating specific behavioral objectives to test items; planning and constructing classroom tests; and, statistical analysis of test scores.

DH 455. Careers in Dental Hygiene Education. **(5-8-8 hours)**
Prerequisite: Education Tract Dental Hygiene student
The dental hygiene student who exhibits a special interest in teaching dental hygiene is given an opportunity to develop course outlines and appropriate audio-visual materials for a micro teaching experience presented to first year dental hygiene students. In addition, time is allotted for previewing and implmenting clinical teaching techniques.

DH 405. Dental Hygiene Practice. **(4-0-4 hours)**
Prerequisite: Clinical Tract Dental Hygiene student
Attention will be given to the economics of practice, preparation of a case presentation, guest lecturers, seminars, and panel discussions relevant to the practice of dental hygiene.

*Dental Hygiene courses can also be found under Allied Health Sciences.

Dental Laboratory Technology

DLT 101. Physics and Chemistry of Dental Materials. **(5-0-5 hours)**
This course covers the physical and chemical properties of dental materials utilized by dental laboratory technologists with special emphasis on terminology applicable to laboratory materials.

DLT 111. Dental Materials Laboratory. **(1-6-3 hours)**
This course given concurrently with DLT 101 emphasizes manipulation of all dental materials used in the dental laboratory.

DLT 112. Head and Neck Anatomy. **(2-0-2 hours)**
The anatomy, histology and physiology, of the head and neck with emphasis on structures and functions of the oral cavity.

DLT 113. Inlays, Crown and Bridge. **(2-12-6 hours)**
Prerequisites: DLT 111 and OCC 101
Instruction in techniques include the proper care of impressions and pouring working casts with removable dies. Fabrication of inlays, crowns and small bridges using gold and acrylic veneers is also included.

DLT 115. Disease and Contamination Prevention. **(1-0-1 hour)**

This course introduces the student to organisms that produce disease and the sterilization and disinfection needed to prevent contamination.

DLT 116. Dental Ceramics. **(2-18-8 hours)**

Prerequisite: DLT 113

A continuation of instruction in crown and bridge fabrication. Basic techniques for porcelain to metal restorations and soldering fixed units will be included.

DLT 121. Dental History, Ethics and Jurisprudence. **(1-0-1 hour)**

Introduces the objectives, responsibilities, opportunities and the quality of conduct and attitude of the dental health team. Emphasis will be given to the dental practice acts.

DLT 213. Removable Partial Dentures. **(2-18-8 hours)**

Prerequisite: DLT 218

This course involves all phases of partial denture construction. Terminology classification and principles of design are included.

DLT 214. Complete Dentures. **(2-9-5 hours)**

Prerequisites: DLT 114 and DLT 218

Introduction to complete denture construction from the preliminary impression to the finished denture.

DLT 215. Orthodontics and Pedodontics. **(1-3-2 hours)**

This course provides instruction in basic orthodontic and pedodontic techniques. Emphasis is placed on wire bending and soldering.

DLT 216. Advanced Complete Dentures. **(1-12-5 hours)**

Prerequisites: DLT 213 and DLT 214

Instruction in techniques involved in arranging various types of artificial teeth. Staining and fluid resin techniques will be included.

DLT 218. Advanced Dental Ceramics. **(1-18-7 hours)**

Prerequisites: DLT 113 and DLT 114

Introduction in fabricating aluminous porcelain jacket crowns, porcelain jacket crowns and staining jacket crowns. Soldering and repairing porcelain bridges is included.

DLT 221. Principles of Laboratory Management. **(5-0-5 hours)**

This course includes accounting and management principles necessary in managing a dental laboratory. Techniques in staffing, planning and controlling a dental laboratory are included.

DLT 222. Laboratory Practice. **(0-30-10 hours)**

This course is designed to give the student the opportunity to observe skilled dental technicians performing their craft and put into practice, through application, those skills which he/she has learned in school the previous six quarters.

DLT 225. Dental Technology Seminar. **(1-12-5 hours)**

This course is designed to give the student the opportunity to formally present a report on a dental appliance he has constructed. An oral and written report is required.

OCC 101. Dental Anatomy and Occulsion. **(2-9-5 hours)**

A study of individual tooth morphology with emphasis on the relationship, alignment and function of the teeth in the oral cavity.

OCC 102. Principles of Occulsion and Mastication. **(2-3-3 hours)**

Further instruction in dental occulsion, introduction to various mandibular movements, centric stops and the development of functional occulsion.

DLT 233/234. Selected Topics.

Prerequisite: Permission of Program Director

An independent study course that provides the opportunity for the student to do research and/or increase his laboratory skills. Clock hours and course hours assigned on individual basis.

Medical Record Administration

J. Sirmans, Chairperson; M. Glennan; B. Harms; E. Wallace.

***MRA 301, 302. Medical Terminology.** **(2-2-3 hours)**

Prerequisite: basic Anatomy course

A study of the language of medicine including word construction, definition, and use of terms related to all areas of medical science, hospital services, and health related fields.

MRA 310, 311, 410, 411. Theory of Medical Record Administration. **(4-2-5 hours) (3-0-3 hours) (5-2-6 hours) (4-2-5 hours)**

A survey of the history and development of medical record systems; an in-depth study of the principles of securing, analyzing, processing, preserving, and using medical data; development of indexes, registers, and hospital statistics; inter-relationships of various types of institutions and agencies involved in health care.

***MRA 319. Principles of Management.** **(5-0-5 hours)**

An introductory study of the management process and the fundamental functions of planning, organizing, actuating, and controlling, with emphasis on applications to the health care environment.

MRA 320. Organization and Administration I. **(3-4-5 hours)**

Prerequisite: Principles of Management

A study of the planning function of management as related to office management in a medical record department.

MRA 340, 341, 440. Directed Experience. **(0-6-2 hours) (0-6-3 hours) (0-4-2 hours)**

Supervised learning experience through which the student develops insight, understanding and skill in record keeping in hospitals and other medical institutions. The student learns to deal with problems of department and personnel management, accepts responsibilities for certain jobs in the medical record department, gains experience in working with professional and non-professional groups in a health agency, and recognizes the need for preservation of the confidentiality of medical information.

***MRA 401, 402. Fundamentals of Medical Science. (5-0-5 hours) (5-0-5 hours)**
Prerequisite: MRA 302 or Permission of Instructor
An introduction to medical science including study of nature and cause of disease, treatment and management of patients. Presented by the physicians representing all of the major clinical areas of medicine.

MRA 415. Medical Record Administration Information Systems. (15-6-18 hours)
This course consists of a curricular module set in one quarter with concentration of means of processing information and systems analysis as related to health care. The course includes basic introduction to computer fundamentals and uses in supporting health care delivery and systems analysis concepts and techniques related to medical record department functions. Students are able to use as models appropriate clinical applications of an automated Hospital Information System. Opportunity is provided for research and design of manual and automated hospital indexes and development of forms and procedures to be used in other hospital applications and functions.

***MRA 420. Organization and Administration II. (3-0-3 hours)**
Prerequisite: Principles of Management
A study of the actuating function of management covering such topics as psychology of personnel, selection and placement of personnel, employee training, salary administration, and supervision.

MRA 421. Organization and Administration III. (0-10-5 hours)
Student projects and research designed to utilize skills and knowledge from other courses related to management of a medical record department, Independent study.

***MRA 422. Legal Concepts for the Health Fields. (3-0-3 hours)**
Principles of law affecting health records; rights of persons requiring information from medical records; mediocolegal problems; court procedures; principles of ethics; management of release of information from hospital medical records.

MRA 425. Seminar. (3-0-3 hours)
A seminar to explore special problems in Medical Record Administration and health care in general.

MRA 441. Directed Experience IV. (0-16-8 hours)
An administrative affiliation of four weeks duration in a variety of health care facilities in the Southeast. Student learning experiences are coordinated with the academic curriculum and supervised by qualified professional personnel in each affiliation site.

*Open courses.

Medical Technology

A. Anderson, Chairperson; J. Crowley; B. Edwards; P. Greenup; E. Kenimer; D. Kramer; P. Larison; G. Rinker; A. Shaikh; A. Winningham.

MTC 302. Laboratory Medicine Case Presentation. (1-0-1 hours)
Current patients presented and discussed by students and faculty integrating pathophysiology, biochemistry, microbiology and anatomical abnormalities where applicable.

MTC 303. Laboratory Medicine Case Presentation. (1-0-1 hours)

MTC 304. Laboratory Medicine Case Presentation. (1-0-1 hours)

MTC 305. Laboratory Medicine Case Presentation. (1-0-1 hours)

MTC 307. Introduction to Medical Technology. (0-1-1 hours)
This course is designed to assist the entering student develop a frame of reference to the study of medical technology. Discussions and laboratory visits are designed to provide the student with an overview of the professions in laboratory medicine. History, accreditation, education and training, medical ethics and professionalism are discussed.

MTC 308. Venipuncture Techniques. (0-2-2 hours)
A practical experience in blood drawing in a clinical setting.

MTC 309. Education. (1-0-1 hours)
Basic concepts of theories and techniques.

MTC 363. Urinalysis and Fluids. (2-3-3 hours)
Prerequisites: MTC 366 or permission of instructor
A study of the diagnostic value of urine and body fluids rather than blood using basic chemical analysis and microscopic examination.

MTC 366. Introduction to Clinical Chemistry I. (2-6-5 hours)
Didactic and laboratory experience designed to introduce the student to the basic concepts of electronics, spectrophotometry, potentiometry, flame emission, atomic absorption, chromatography, isotope measurement automation and laboratory mathematics for solution preparation, dilutions and standard curve utilization. Trouble shooting ability is expected upon completion.

MTC 371. Medical Mycology and Parasitology. (3-4-5 hours)
Introduction to fungi and yeasts of medical importance, including isolation, identification, pathogenesis, treatment and safety precautions. To also include the study of more common isolates classified as contaminants in the clinical laboratory. Introduction to techniques for the examination and identification of intestinal parasites which infest man.

MTC 372. Diagnostic Microbiology I. (3-6-6 hours)
Introduction to the basic principles and techniques of diagnostic microbiology as they apply to the care of patients with infectious diseases. To include the study of procedures for isolation, identification and reporting of infectious agents; the epidemiology of transmissible diseases, the basis of antibiotic therapy and of the importance of accurate laboratory data.

MTC 375. Basic Immunology. (2-3-3 hours)
Two lectures or recitations per week and one lab session per week. Basic principles of immunology; antigenic and antibody response with serologic methodology.

MTC 381. Clinical Hematology I. (4-5-6 hours)
Prerequisites: MTC 366, 367, and CMB 345. In addition, the student must have completed requirements for MTC 375 or be enrolled concurrently. Exceptions are made only upon permission from the instructor.

Blood Cell derivation, maturation and function with emphasis on normal blood and bone marrow morphology. Basic principles of hemostasis and blood coagulation. Study and interpretation of basic hematologic procedures utilized in diagnosis and treatment of various blood dyscrasias and hemorrhagic disorders. Practical experience is gained in all basic procedures using both manual and automated techniques.

MTC 382. Clinical Microscopy and Hematology. (4-3-5 hours)
Principles of urinalysis. Principles of tests on body fluids other than blood. Morphology and blood cells with emphasis on normal cells. Manual and machine counts of red and white blood cells. Hemoglobinometer hemoglobin determination. Instrumentation and quality control.

MTC 391. Techniques of Management. (2-0-2 hours)
Basic concepts of management theories and application. Emphasis placed on management functions related to the clinical laboratory and the development of concepts and practice of techniques through case methods, group activities, and/or role playing.

MTC 394. Directed Individual Study. (TBA)

MTC 395. Directed Individual Study—Blood Bank. (TBA)

MTC 396. Directed Individual Study—Chemistry. (TBA)

MTC 397. Directed Individual Study—Hematology. (TBA)

MTC 398. Directed Individual Study—Microbiology. (TBA)

MTC 399. Directed Individual Study—Instrumentation. (TBA)

MTC 440. Clinical Chemistry. (6-9-10 hours)
Prerequisites: MTC 363, 366, 367, and CMB 345 or permission of instructor.

Didactic and laboratory experience designed to integrate chemistry, biochemistry, mathematics and instrumentation into the practice of clinical chemistry as a medical technologist. Study will include the application of clinical chemistry to diagnosis and treatment of diseases.

MTC 442. Clinical Practicum Chemistry. (5-30-10 hours)
Prerequisites: MTC 440 or permission of instructor
Practical application and techniques in Clinical Chemistry.

MTC 448. Diagnostic Microbiology II. (5-8-9 hours)
Prerequisites: MTC 372, 371, or permission of instructor
Distribution and nature of pathogenic microorganisms; mechanisms of transmission, pathogenesis; principles of communicable diseases and disease control; diagnostic methods of isolation and identification including serological methods. Theoretical and practical knowledge presented so that students work with materials and problems related to diagnostic microbiology.

MTC 449. Clinical Practicum Diagnostic Microbiology. (5-30-10 hours)
Prerequisites: MTC 448 or permission of instructor
Practical application of diagnostic techniques in the hospital microbiology laboratory.

MTC 460. Advanced Instrumentation. (3-8-7 hours)
Prerequisites: MTC 366, 367, and CMB 345 or permission of instructor
Instrument principles and functions discussed and applied in depth. The greatest emphasis will be placed on automation in clinical chemistry.

MTC 472. Immunohematology Related to Transfusion Service. (5-8-9 hours)
Five lectures or recitations and two lab sessions per week. Introduction to red cell antigens and antibodies and their interactions; basic outline of inheritance, leukocyte and platelet groups and components preparation. Students learn the proper procedures and controls used in preparation of a unit of blood for transfusion; how to approach the identification of an unknown antibody; unknown blood group; titering of antibodies and special procedures such as absorption and elution.

MTC 473. Clinical Practicum Blood Bank. (5-30-10 hours)
Prerequisite: MTC 472
In-depth clinical experience and practical application in a hospital blood bank including donor room experience from interviewing of donors to the proper drawing of a unit of blood; plasmapheresis of donors and component preparation; and freezing of blood.

MTC 474. Diagnostic Immunology. (2-4-4 hours)
Prerequisite: MTC 375 or permission of instructor
Comprehensive methodology in theoretical principles for diagnostic immunology.

MTC 481. Clinical Hematology II. (5-8-9 hours)
Prerequisites: MTC 381 or permission of instructor
An in-depth study of qualitative and quantitative changes in peripheral blood and bone marrow cells found in pathologic disorders. Correlation of hematologic tests with other clinical findings in the diagnosis or various blood dyscrasias. Practical experience is gained in cytochemical study of blood cells, tests utilized in the differential diagnosis of hemorrhagic disorders, hemoglobinopathies, and the study of abnormal peripheral blood and bone marrow films. Study and interpretation of case history studies. Students participate in Laboratory Medicine Case Presentation.

MTC 482. Clinical Practicum Hematology. (5-30-10 hours)
Prerequisite: MTC 481 or permission of instructor
Practical application and techniques in hematology.

MTC 493. Seminar in Medical Technology. (1-0-1 hours)

MTC 494. Directed Individual Study. (TBA)

MTC 495. Directed Individual Study—Blood Bank. (TBA)

MTC 496. Directed Individual Study—Chemistry. (TBA)

MTC 497. Directed Individual Study—Hematology. (TBA)

MTC 498. Directed Individual Study—Microbiology. (TBA)

MTC 499. Directed Individual Study—Instrumentation. (TBA)

Occupational Therapy

N. Prendergast, Chairperson; V. Allen; P. Carlsen; B. Dias; C. Endebrock; A. Evans; M. Lennon; N. Moulin; B. Neves; N. Tisdall.

OTH 300. Occupational Therapy and the Community. (3-2-4 hours)
An introduction to the profession of occupational therapy. A frame of reference for practice is developed through the study of history and current trends in the field. The role of occupational therapy in relation to current health and social issues is emphasized. Includes field experiences in occupational therapy and the community.

OTH 301. Concepts in Development. (2-0-2 hours)
Major concepts in human development. Emphasis is on man and his life tasks, the acquisition of roles and adaptive processes.

OTH 302. Principles of Occupational Therapy I. (1-4-3 hours)
The assessment process and program planning in occupational therapy. Various assessment procedures are studied and practiced. Emphasis is on infancy through adolescence. Correlated with OTH 305 and OTH 310.

OTH 303. Group Process. (0-4-2 hours)
An experiential group course in which students and faculty participate in group exercises. The purpose is to present didactic material on group processes after experience in groups so that theory may be generalized from practical applications.

OTH 304. Principles of Occupational Therapy II. (2-6-5 hours)
A continuation of OTH 302 with emphasis on early adulthood through aging. Correlated with OTH 307 and OTH 320.

OTH 304a. Field Work Experience. (0-40-8 hours)
Prerequisite: OTH 304
Full-time field work experience with emphasis on prevention and health maintenance. (June and July)

OTH 305. Human Developmental Process: Infancy through Adolescence. (1-4-3 hours)
Selected aspects of normal human development are presented through discussion of theories of development in physical, perceptual-motor, cognitive and sociocultural areas. Media and activities of childhood and adolescence are analyzed. Field activities include visits to schools and observations of individual children.

OTH 307. Developmental Process: Adulthood through Aging. (2-6-5 hours)
A continuation of human development with emphasis on early adulthood, middle age and aging. Laboratory and field experiences focus on the analysis of homemaking, work and leisure time activities.

OTH 310. Problems in Dysfunction. (1-2-2 hours)
The study of health problems from infancy through adolescence. Emphasis is placed on deficits, delays, deprivation and stress as causes of performance problems in self-care, productivity, and play/leisure activities. Correlated with OTH 302 and OTH 305.

OTH 320. Problems in Dysfunction. (1-2-2 hours)
The problem of health problems from young adulthood through aging. Emphasis is placed on deficits, delays, deprivation and stress as causes of performance problems in self-care, productivity and play/leisure activities. Correlated with OTH 304 and OTH 307.

OTH 332. Kinesiology. (2-4-4 hours)
The study of Kinesiology, biomechanics, growth and development, normal gait and patterns of human motion. Classroom and laboratory experiences correlated with OTH 307.

OTH 400. Principles of Occupational Therapy III. (4-8-8 hours)
The evaluation and management of patients/clients with psychosocial deficits or dysfunction.

OTH 400a. Field Work Experience. (0-40-8 hours)
Prerequisite: OTH 400
Full-time field work experience with emphasis on the evaluation and management of clients/patients with psychosocial deficits and/or dysfunction.

OTH 410. Principles of Occupational Therapy IV. (4-8-8 hours)
The evaluation and management of patients/clients with physical deficits or dysfunction.

OTH 410a. Field Work Experience. (0-40-8 hours)
Prerequisite: OTH 410
Full-time field work experience with emphasis on the evaluation and management of clients/patients with physical deficits and/or dysfunction.

OTH 420. Special Problems. (2-0-2 hours)
The study of contemporary health problems and issues. Students are involved in the selection and development of topics and activities.

OTH 430. Research Design and Methodology. **(3-0-3 hours)**

An introduction to research methodology and experimental design. Correlated with OTH 440. Independent Study.

OTH 440. Independent Study. **(0-0-3 hours)**

An individual project dealing with a special area of interest to the student.

Physical Therapy

B. May, Chairperson; S. Bemis; B. Duffer; S. Irwin; V. Jones; W. Mauser; E. Myers; H. Smith.

PTA 101. Introduction to Physical Therapy. **(3-6-5 hours)**

Prerequisite: Physical Therapist Assistant student or permission of instructor

The course is designed to assist the entering student in developing a frame of reference for the study of physical therapy. Discussions, laboratory exercises and clinical visits are designed to provide the student with an overview of the physical therapy profession.

PTA 105. Functional Anatomy I. **(3-4-5 hours)**
PTA 106. Functional Anatomy II. **(3-4-5 hours)**

These courses will combine the subject matter in human anatomy and kinesiology. Anatomically the major emphasis will be on giving the student a basic knowledge of the extremities and trunk with an overview of the major systems. The kinesiology will concentrate on the extremities and trunk with an introduction to biomechanics and movement analysis.

PTA 120. Topics in Physical Therapy I. **(1-4-3 hours)**

Prerequisite: Physical Therapist Assistant student

The development of the student's ability to perform a physical therapy treatment is approached through the study of the physiological and psychological factors contributing to the patient's status. Physical therapy activities are presented sequentially in relation to pathological processes and the patient's total needs. Classroom and laboratory activities are designed to provide the student the opportunity to attain the skills of a physical therapist assistant.

PTA 130. The Helping Relationship. **(2-0-2 hours)**

The study of factors contributing to effective human interaction with emphasis on the relationship of health and behavior.

PTA 140. Clinical Practicum I. (Part-time)

Prerequisite: Physical Therapist Assistant student

The practical application of the physical therapist assistant student's knowledge and skills in a clinical setting under the supervision and guidance of licensed physical therapists and physical therapist assistants.

PTA 220. Topics in Physical Therapy II. **(3-4-5 hours)**
PTA 221. Topics in Physical Therapy III. **(6-14-13 hours)**
PTA 222. Topics in Physical Therapy IV. **(2-12-8 hours)**
PTA 223. Topics in Physical Therapy V. **(2-12-8 hours)**

Prerequisite: Physical Therapist Assistant student

The development of the student's ability to perform a physical therapy treatment is approached through the study of the physiological and psychological factors contributing to the patient's status. Physical therapy activities are presented sequentially in relation to pathological processes and the patient's total needs. Classroom and laboratory activities are designed to provide the student the opportunity to attain the skills of a physical therapist assistant.

PTA 230. Studies in Management. **(5-0-5 hours)**

Prerequisite: Physical Therapist Assistant student

The study of management theories and techniques utilized in the administration of a physical therapy service. The student will learn the role and responsibilities of the physical therapist assistant within the physical therapy department, other hospital services, and other health care agencies.

PTA 231. Health Care Issues. **(5-0-5 hours)**

Prerequisite: Physical Therapist Assistant student

The exploration of current issues and trends in health care at the state and national levels and their effects on the delivery of physical therapy services. Topics to be studied include methods of health care delivery, national health insurance, health maintenance organizations, professional peer review, and other relevant issues.

PTA 240. Clinical Practicum II. (Part-time) **(0-8-2 hours)**
PTA 241. Clinical Practicum III. (Part-time) **(0-8-2 hours)**
PTA 242. Clinical Practicum IV. (Full-time) **(0-4-6 hours)**
PTA 243. Clinical Practicum V. (Full-time) **(0-4-6 hours)**

Prerequisite: Physical Therapist Assistant student

The practical application of the physical therapist assistant student's knowledge and skills in a clinical setting under the supervision and guidance of licensed physical therapists and physical therapist assistants.

PTH 300, 301. Dynamics of Human Function I, II. **(5-4-7 hours)**

Prerequisite: Physical Therapy student

The study of kinesiology, biomechanics, growth and development, normal gait, and patterns of human motion. Classroom and laboratory experiences are closely integrated with anatomy and physiology.

PTH 310. Concepts of Dysfunction I. **(12-6-15 hours)**

Prerequisite: Physical Therapy student

The study of all relevant pathological, medical and therapeutic concepts related to the practice of physical therapy. Included are physical therapy techniques and procedures, evaluative processes and development of treatment programs in relation to dysfunction. Classroom and laboratory experiences spiraling from the simple to the complex are utilized to help the student develop the necessary skills in physical therapy. Experiences related to the psychological philosophical, economic, social and vocational aspects of illness and disability are included in appropriate areas. Seminar, independent study and other active learning techniques are utilized throughout the sequence. Concepts are cumulative and continued growth is dependent on mastery and utilization of previous knowledge.

PTH 320. Clinical Experience I. (Part-time) **(1 hour)**
PTH 321. Clinical Experience II. (Part-time) **(1 hour)**
PTH 322. Clinical Experience III. (Part-time) **(1 hour)**

Prerequisite: Physical Therapy student

Clinical experiences in a variety of health care facilities are provided in facilities near the Medical College campus. These are provided one time per week during the winter and spring quarters of the junior year.

PTH 340. Interpersonal Relations. (2-0-2 hours)
Prerequisite: Physical Therapy student
The course is designed to assist the student to develop interpersonal communications skills and to serve as an introduction to the principles and techniques used in the helping process.

PTH 401. Chest Physical Therapy for Respiratory Therapists. (1-2-2 hours)
Prerequisite: Permission of Instructor
This course will provide the student with the basic concepts and techniques of breathing exercises and segmental bronchial drainage with an emphasis on indications and contraindications for different disease entities.

PTH 410. Concepts of Dysfunction II. (12-6-15 hours)
PTH 411. Concepts of Dysfunction III. (12-4-14 hours)
PTH 412. Concepts of Dysfunction IV. (10-2-11 hours)
Prerequisite: Physical Therapy student
See Description in PTH 310.

PTH 420. Clinical Experience IV. (Full-time) (2 hours)
PTH 421. Clinical Experience V. (Full-time) (2 hours)
Prerequisite: Physical Therapy student
The student will work in health care facilities in the Southeastern region of the United States. The experiences are structured to provide clinical experiences directly related to the academic curriculum.

PTH 422. Clinical Experience VI. (6 hours)
PTH 423. Clinical Experience VII. (6 hours)
Prerequisite: Physical Therapy student
Six weeks of full-time clinical experiences provided in a wide variety of health care facilities. The experiences are designed to provide the student with the opportunity to develop skill in the art of treating a variety of patients.
See description in PTH 320.

PTH 430. Research Methodology. (5-0-5 hours)
Prerequisite: Physical Therapy student or permission of instructor
An introduction to interpreting and evaluating research, literature, basic statistics and statistical reasoning, and to the scientific method.

PTH 431. Community Health. (3-0-3 hours)
Prerequisite: Physical Therapy student
The study of public and community health programs and the role of physical therapy in community medicine. Courses consist of classroom instruction and directed field experiences in various aspects of community health.

PTH 432. Designs for Administration. (5-0-5 hours)
Prerequisite: Physical Therapy student
Theories and application of administrative activities including personnel relations, budgeting, planning, organizing and operating a physical therapy department.

PTH 433. Seminar. (2-0-2 hours)
Prerequisite: Physical Therapy student
A seminar to explore special problems in physical therapy and health care.

PTH 434. Learning Processes. (5-0-5 hours)
Prerequisite: Physical Therapy student
Introduction to learning theory with application to physical therapy and special emphasis on in-service and continuing education.

PTH 440. (2-0-2), 441 (0-10-5), Senior Project.
Prerequisite: Physical Therapy student
Each student will plan and implement a project which uses the scientific method to answer a question. A variety of methodology may be used.

PTH 442. Independent Study. (0-10-5 hours)
Time and credit for independent study is given to each student during the senior year. The purpose is to provide the student with the opportunity to study some aspect of physical therapy and health care in depth. These experiences are designed by the student with guidance from appropriate members of the faculty. All students must participate in some aspects of independent study prior to graduation.

Physician's Assistant

J. Palmer, Chairperson; J. Estep; L. Forbes; C. Newman; K. Smith; J. Soparas.

PAD 308. Physical Diagnosis. (3-4-5 hours)
This course was designed to develop student skills in performing physical exams and taking medical histories. The student is taught to use the basic hand instruments utilized in performing physical examinations. The students are introduced to normal and abnormal findings. Clinical coordinators are assigned the responsibility for providing patient contact for the students within their team.

PAD 309. Physical Diagnosis. (3-4-5 hours)
A continuation of PAD 308.

PAD 314. Laboratory Medicine. (3-0-3 hours)
This course was designed to introduce the students to some of the principles of clinical laboratory tests prior to the student's clinical training. Implications of laboratory tests are discussed as related to the presenting complaints of the patients or after initial history, physical examination and routine laboratory work has been performed.

PAD 332. Diagnostic Specialty Techniques and Procedures. (5-0-5 hours)
This course was developed to accomplish the following: (1) Expose the physician's assistant student to the methods and procedures utilized by physicians in assessing patients in their particular specialities. (2) To introduce the student to the required as well as selected elective clinical rotations. (3) To introduce the student to areas that do not receive specific treatment in other courses but are essential to all professions in the health care field, i.e., communications, medical ethics, etc.

PAD 335. Introduction to Minor Surgical Procedures. (1-4-3 hours)
This course introduces the student to Emergency Room patient care and some areas of surgery. The students perform procedures on dogs that they will later be expected to assist with or perform on patients. The following areas are covered: Demonstration of intravenous anesthesia; donning of gowns; steril techniques; preparation of surgical sites; skin incision and suture;

venipuncture; tracheal intubation; local anesthesia; infiltration and epidural; suture removal; cut-down; hemostasis; necropsy of the dog to demonstrate fresh tissue and preparation of tissues for histopathology.

PAD 347. Human Growth and Development. **(3-0-3 hours)**

This course provides a general orientation to the growth and changing behavior of human beings throughout the life span and to obtain a beginning understanding of health problems and their impact upon development and optimal functioning.

Radiologic Technologies

W. H. Pool, Medical Director; C. H. Hall, Chairperson; L. Avecilla; W. Hibbard; N. Lavin; N. Maddox; J. Trueblood; R. Webb; S. Wilkerson.

NMT 301. Introduction to Nuclear Medicine Technology. **(1-0-1 hours)**

An introduction to the study of nuclear medicine technology is presented. Patient relations, nursing care, legal considerations and departmental organization are considered as well as concepts of technology, safety, and quality control.

NMT 302. Seminar. **(1-0-1 hours)**

A review of nuclear medicine literature is made through research, discussion, and student or guest presentations.

NMT 311, 312. In Vivo Nuclear Medicine Technology. **(3-2-4 hours)**

The two-course sequence begins with a study of the use of basic instrumentation and advances to a study of the rationale, procedure, and technical aspects of the imaging techniques and other in vivo studies. Laboratory exercises and case studies are an integral part of the course.

NMT 313. Radiochemistry. **(3-2-4 hours)**

Routine procedures of the radiochemical laboratory, particularly in vitro studies, and preparation of pharmaceuticals are presented in lecture and laboratory sessions.

NMT 411. Radiochemical Laboratory Procedures. **(2-4-4 hours)**

Radioassay procedures, both routine and nonroutine are studied. Various radioassay techniques and their rationales are presented in lecture sessions, while the major portion of the learning process is centered in the laboratory. Students are expected to assume responsibility for limited research, and to work with a minimum of supervision. Quality control is emphasized throughout the course.

NMT 412. Radiopharmacy. **(5-0-5 hours)**

Basic principles of radiopharmacy as practiced in the nuclear medicine department are presented. Radiopharmaceutical production, methods of biological action, chemical reactions, radiosafety, government regulations, and quality control are presented.

NMT 422. Selected Topics. **From 2 to 5 hours credit**

Students will be assigned study and research topics according to their special interests. A suitable research paper or report will be a requirement of the course.

NMT 463. Education and Administration. **(5-0-5 hours)**

The educational aspects of the course include methods of teaching, program planning, evaluations, and audio visual production. Administrative aspects include personnel relations, principles of effective management, departmental organization and planning, and time study plans.

Credentialing and preparing for inspections is surveyed from both aspects.

PCS 321. Electrical Fundamentals. **(1-0-1 hours)**

The basic principles of electricity and magnetism, circuit theory, and electrical measurement are presented. An experiment utilizing several test instruments to characterize an electrical circuit is included.

PCS 323. Computer Programming. **(1-2-2 hours)**

The operation and programming of computer calculators is presented. The student will be required to write practical application programs in basic computer language.

PCS 331. Physics in Nuclear Medicine. **(4-0-4 hours)**

An introductory course which covers basic physics with special emphasis on the fundamental concepts of nuclear physics is taught.

PCS 332. Physics of Nuclear Medicine. **(3-4-5 hours)**

Prerequisite: PCS 331

The theory of operation of nuclear medical laboratory instrumentation is presented in lectures which are coordinated with weekly experiments assigned to the student.

PCS 333. Physics of Nuclear Medicine. **(2-2-3 hours)**

Prerequisite: PCS 332

Lectures and student labs are coordinated to cover the calibration of instrumentation used in radiation safety programs. State and Federal regulations controlling radionuclides are reviewed.

PCS 431. Clinical Data Processing. **(4-2-5 hours)**

Prerequisite: College Algebra and PCS 323

The fundamentals of biometrical statistics and calculus are treated with application problems derived from typical clinical data reduction requirements.

PCS 432. Basic Biomedical Electronics and Instrumentation. **(3-3-5 hours)**

The basic principles of medical electronics are presented, including characterization and applications of numerous solid state devices, instrument trouble shooting, and electrical safety in the patient care environment. The laboratory offers an opportunity to become familiar with several test instruments and representative circuitry encountered in medical instrumentation.

PCS 433. Selected Topics. **(3-4-5 hours)**
Prerequisites: PCS 321, 431, 432
A series of topics of special interest to the nuclear medicine student are discussed in seminars. Among the topics included are digital electronics, computer processing of imaging data, equipment selection techniques and the computer interfacing of laboratory equipment.

RAD 100. Survey of Radiologic Technology. **(1-2-2 hours)**
The student is provided with an introduction to the field of radiologic technology and basic patient care, primarily through laboratory settings.

RAD 111. Radiographic Anatomy and Positioning. **(4-2-4 hours)**
The student is provided with an introduction to human anatomy with an intense investigation of the skeletal system. Through the positioning lectures and labs the routine radiographic procedures and projections of the skeletal system will be demonstrated.

RAD 112. Radiographic Anatomy and Positioning. **(4-2-4 hours)**
The student is provided with a basic knowledge of the structures, organs, and functions of the systems directly related to the field of radiology, and the techniques for radiographic positioning of specialized areas of the body, and for routine fluoroscopic procedures.

RAD 113. Radiographic Technique. **(3-0-3 hours)**
The photographic principles of radiologic technology, including films, film holders, and film processing will be covered. Radiographic devices that affect and control the photographic properties of radiographs will be discussed.

RAD 114. Radiographic Technique. **(2-0-2 hours)**
A basic knowledge of specialized adjunct equipment and advanced theory of radiation photography including emphasis on mathematical problems is presented.

RAD 115. Special Topics. **(2-0-2 hours)**
Various utilizations of radiation as they relate to special conditions are presented to the student. During this course the student is exposed to the related fields of Nuclear Medicine and Radiation Therapy.

RAD 211. Radiographic Anatomy. **(2-0-2 hours)**
A basic knowledge of the structures, organs, and functions of the systems indirectly related to the field of Radiology is given.

RAD 212. Special Procedures. **(2-1-2 hours)**
Through lectures and laboratory demonstrations, advanced radiographic procedures of the systems of the body are presented.

RAD 215. Film Critique. **(3-0-3 hours)**
An evaluation of the structural and technical aspects of the finished radiograph to include such areas as positioning, radiographic quality, structure identification and differentiation is presented.

RAD 121. Medical Aspects of Radiologic Technology. **(2-0-2 hours)**
A fundamental knowledge of medicine as concerned with terminology, psychology, and patient-drug reactions with emphasis on Radiologic Technology is presented.

RAD 123, 124, 223. Radiologic Pathology. **(1-0-1 hours)**
Normal pathological conditions pertaining to radiographic examinations and procedures will be presented in a 3 course sequence.

RAD 224. Correlative Diagnostic Techniques. **(3-0-3 hours)**
A basic introduction to new technological advances with emphasis on equipment and theory of image production as concerned specifically with Radiology is presented.

RAD 131, 132. Radiologic Physics. **(2-0-2 hours)**
Prerequisite: PSC 101 or equivalent, or permission
A review of electrical fundamentals and nuclear structure, and study of x-ray generation and interaction with matter; descriptions and principles of operation of diagnostic radiographic equipment, characteristics of x-ray film and film processing, and fundamental radiobiology and radiation protection will be presented. Several experiments involving an x-ray machine simulator are included.

RAD 231. Radiologic Engineering and Special Topics in Radiologic Physics. **(2-0-2 hours)**
Discussions of equipment preventive maintenance, equipment trouble-shooting and failure characterization, and test equipment. Other topics include facilities design, utilization of computers in radiology, and quality control.

RAD 141, 142, 143, 241, 242, 243, 244. Clinical Practicum. **variable credit**
The student performs and demonstrates clinically the knowledge gained in corresponding courses of curriculum. An opportunity for performing as a practicing radiographer is provided.

RAD 402. Survey of Medical Technology. **(1-1-1 hours)**
The Radiologic Technology student receives a general overview of medical technology and a more specific knowledge of STAT procedures. Medical technology is presented as a diagnostic process, complementary to radiologic technology.

RAD 403. Radiobiology **(1-0-1 hours)**
The medical aspects of radiobiology presented in the course include cellular, systemic, and total body responses. Somatic and genetic effects are surveyed. Emphasis is placed on the proper clinical practice of radiation medicine as a method of reducing patient, worker, and general population exposure.

RAD 411. Seminar in Advanced Radiographic Technique. **(2-0-2 hours)**
A more advanced understanding of the theory of radiographic technique and modern technological advances is given.

RAD 412. Introduction to Quality Assurance. **(1-0-1 hours)**
The basic principles of photographic quality assurance, the establishment of a quality assurance program, and the application of such a program is given.

RAD 413. Principles of Teaching. (1-0-1 hours)
The principles and techniques of teaching methods with special emphasis on Radiologic Technology is presented.

RAD 421. Radiology Equipment. (4-3-5 hours)
This course is designed for students who expect to become technical managers in a radiology department. Theory and design for diagnostic equipment will be presented with an emphasis on current and future developments. Much of the lecture material will be obtained from scientific journals published within the preceeding year.

RAD 422. Radiation Detection Instrumentation. (3-4-5 hours)
This course is designed to give the student a general knowledge of the instrumentation used in the detection of ionizing radiation. Lectures and labs will include practical use of Geiger counters, pulse height analysers, rectilinear scanners and gamma cameras.

RAD 423. Selected Topics. (3-4-5 hours)
Prerequisite: RAD 422
A series of topics of special interest to the Radiologic Technologist are presented. Among these are programming techniques for computer calculators, departmental planning, CT scanners, photographic techniques, radiation therapy dosimetry and treatment planning and calibration of x-ray machines.

RAD 431, 432, 433. Advanced Radiologic Physics. (2-0-2 hours)
These courses cover the necessary fundamentals of physics and their applications in the different areas of radiology. Broad coverage is given to radioactive materials and x-rays as used in diagnosis and therapy. Some specific applications also covered are ultrasound, CT scanning, quality control, dosimetry, and radiation protection.

RAD 441, 442, 443. Clinical Practicum. (0-15-5 hours)
These courses offer a study of advanced radiographic techniques and allied areas with an opportunity to obtain practical knowledge in some of the following areas. The standard period of rotation is one month to one quarter, depending on the area.

a. Department Management
b. Diagnostic Procedures
c. Engineering
d. Hemodynamics
e. Nuclear Medicine
f. Radiation Health Physics and Radiation Protection
g. Radiation Oncology
h. Special Diagnostic Procedures
i. Teaching
j. Ultrasound
k. CAT Scanning

RAD 453. Survey of Allied Diagnostic Technologies. (2 hours)
The procedures of nuclear medicine are related to specific procedures of laboratory medicine, radiology, ultrasound, computerized tomography, and oncology. Particular emphasis is given to the correlation of diagnostic examinations in these disciplines. Students learn through guided studies, observation, and restricted participation in the specific procedures of the allied areas.

RAD 461, 462, 463. Radiology Management. (1-0-1 hours)
Management techniques will be presented for students who expect to have administrative duties in a radiology department.

RDT 341, 342, 343. Radiation Therapy Technology. (0-30-5 hours)
Experience in the Radiation Oncology Division including patient positioning treatment techniques, and record keeping and verification procedures is given.

RDT 311, 312, 313. Principles of Radiation Oncology. (5-0-5 hours)
A comprehensive presentation of oncologic principles including instruction in both medical and physical aspects of cancer treatment is given. An introduction to computer techniques and treatment planning will be included.

UST 400. Introduction to Diagnostic Ultrasound. (2-0-2 hours)
This course is intended to provide an overview of the use of ultrasonic techniques in medicine. The history of diagnostic ultrasonics, and the physics of sound-tissue interaction are presented. Descriptions of commercially available, as well as developmental instruments are included. Clinical applications in several areas are discussed.

Respiratory Therapy

R. Beckham, Chairperson; P. Carter; S. Loveland.

RTH 300. Clinical Practicum I. (0-16-8 hours)
Prerequisite: RTH 301
This course is designed to give the student an opportunity to perform and to demonstrate clinically the knowledge gained in parallel courses. An opportunity for direct patient care and bedside learning is provided.

RTH 301. Respiratory Therapy Orientation. (2-8-6 hours)
A study in the history of respiratory therapy and an in-depth knowledge of the job description of the various respiratory personnel and their relationship to other health care members. Emphasis will be placed on attitude and responsibilities of the different health care workers. In addition, medical gas administration and equipment disinfection and sterilization will be presented.

RTH 302. Clinical Practicum II. (0-16-8 hours)
Prerequisite: RTH 300, 305
This course is designed to give the student an opportunity to perform and to demonstrate clinically the knowledge gained in parallel courses. An opportunity for direct patient care and bedside learning is provided.

RTH 303. Independent Study. (variable credit)
Prerequisite: Senior standing or permission of the instructor
A course designed to provide the student with the opportunity to pursue a course of study of particular interest in a non-resident or informal setting.

RTH 304. Cardiopulmonary Resuscitation.
An introduction to the most current practice of cardiopulmonary resuscitation. Various problems asso-

ciated with CPR will be covered and equipment needs will be stressed. Factors predisposing individuals to cardiac arrest will be covered. Upon successful completion of this course the student will be awarded a certificate attesting to the fact that he/she is trained in the art of basic cardiopulmonary resuscitation.

RTH 305. Basic Respiratory Therapy, Appliances and Modalities. (3-4-5 hours)
Prerequisite: RTH 301

This course will provide the student with the theories and principles of positive pressure breathing humidity and aerosol administration, and the function, repair and maintenance of the equipment involved. Medical gas analysis and miscellaneous equipment will be covered.

RTH 310. Cardiopulmonary Pathophysiology. (4-0-4 hours)
Prerequisites: RTH 301, ANM 330, PHY 311 and 312

This course will cover the pathophysiology of disease entities that primarily involve the pulmonary system as well as the cardiovascular system. The entiology and pathophysiology of pulmonary disease, abnormal pulmonary mechanics, and a brief description of the treatment of each disease process will be covered.

RTH 312. Library Research. (1-2-2 hours)

This course is designed to give the student experience in searching medical literature. The student will prepare and present a paper of his own composition.

RTH 402. Clinical Practicum III. (0-16-8 hours)
Prerequisite: RTH 302

This course is designed to give the student an opportunity to perform and to demonstrate clinically the knowledge gained in parallel courses. An opportunity for direct patient care and bedside learning is provided.

RTH 404. Clinical Practicum IV. (0-16-8 hours)
Prerequisite: RTH 402

This course is designed to give the student an opportunity to perform and to demonstrate clinically the knowledge gained in parallel courses. An opportunity for direct patient care and bedside learning is provided.

RTH 405. Ventilation, Quantitation and Clinical Evaluation. (2-2-3 hours)
Prerequisite: RTH 305

A study is made of the criteria for ventilation, weaning from ventilation, intubation, extubation and clinical measurements used for evaluating adequacy of ventilation and oxygenation.

RTH 406. Clinical Practicum V. (0-16-8 hours)
Prerequisite: RTH 404

This course is designed to give the student an opportunity to perform and to demonstrate clinically the knowledge gained in parallel courses. An opportunity for direct patient care and bedside learning is provided.

RTH 407. Methods of Ventilatory Alteration. (3-2-4 hours)
Prerequisites: RTH 305, 405

A study is made of the mechanical means to assist and control ventilation. Emphasis will be placed on function, repair and troubleshooting the mechanical devices.

RTH 408. Special Clinical Rotation. (0-8-4 hours)
Prerequisites: Senior standing and permission of the department chairman

This course is designed to give the student an additional opportunity to participate in a clinical area of particular interest.

RTH 409. Advanced Respiratory Therapy. (2-0-2 hours)
Prerequisite: Senior standing

Through lecture techniques, the student will be presented information on heart-lung pumps, membrane oxygenators, hyperbaric oxygenation, EKGs and experimental developments in respiratory therapy.

RTH 410. Intensive Respiratory Care. (3-2-3 hours)
Prerequisite: RTH 305

An in-depth lecture series involving controlled ventilation of respiratory distress victims using both positive pressure and volume ventilators will be presented. Emphasis will be placed on flow sheets and monitoring techniques provided on a moment-to-moment and hourly basis. An introduction to arterial blood tap techniques will be provided. Knowledge of endotracheal and tracheotomy airway care for these patients will be stressed. Ventilation management and blood gas interpretation will be discussed.

RTH 412. Pulmonary Functions. (2-2-3 hours)
Prerequisite: RTH 310

This course will cover normal and abnormal pulmonary functions as well as acid-base physiology in health and the disease processes. The student will learn to perform and interpret pulmonary function studies. The maintenance and repair of pulmonary function equipment will be covered.

RTH 414. Respiratory Therapy Pharmacology. (1-0-1 hours)
Prerequisites: PHM 301, RTH 305

This course will provide the student with a working knowledge of pharmacological effects, side effects, contraindications, and use of respiratory therapy drugs and autonomic nervous system drugs.

RTH 417. Newborn and Pediatric Respiratory Care. (3-4-4 hours)
Prerequisites: RTH 310, 410 and current registration in 407

Normal growth and development in the newborn through the pediatric age groups will be covered in depth. Disease processes, primarily pulmonary, involving the pediatric age group will be covered in depth, as will attitudes of the therapist, the patient, and family toward illness in this age group.

RTH 420. Respiratory Therapy Community Service. (1-0-1 hours)
Prerequisite: Senior standing and permission of the instructor

This course is designed to introduce the student to health care service, patient education and outpatient duties and responsibilities. Emphasis will be placed on safety, sterilization, equipment maintenance and cost reduction for the home care patient.

RTH 424. Library Research. (1-2-2 hours)
Prerequisite: RTH 312

This course is designed to give the student experience in searching medical literature. The student will prepare and present a paper of his own composition.

RTH 450. Respiratory Therapy Seminar. (3-0-3 hours)
Prerequisites: RTH 312, 424

A survey of recent trends and current literature in respiratory therapy will be conducted by the student.

AHS 400. Survey of Education. (3-0-3 hours)

A systematic development of the administration and educational processes necessary for program design. Major focus will be on the following administrative and educational elements: planning, organizing, directing, learning theory, behavioral objectives, and evaluation.

dentistry

Dean—Dr. Judson C. Hickey
Associate Dean for Academic Affairs—Dr. Thomas J. Zwemer
Associate Dean for Biological Sciences—Dr. George W. Burnett
Associate Dean for Clinical Sciences—Dr. Leon A. Leonard
Associate Dean for Students—Dr. Carl O. Davis
Assistant Dean for Administration—Raymond A. Lackman, Jr.

School of Dentistry

Philosophy

Dentistry is one of the senior health professions, bonded to other health care professions by common goals and objectives. The dentist, the physician, and the health scientist share in contributing to the total health of the individual and his community.

The dentist, in this concept, must have specific knowledge of and skills in the diagnosis, prevention and treatment of diseases associated with the oral cavity, as well as biological understanding of oral health and disease in terms of total health and disease. Furthermore, he must be able to correlate both areas of knowledge to fulfill his role and effectively communicate with colleagues in all health professions.

An understanding of the scientific method is necessary for the dentist to evaluate proposed methods of diagnosis, prevention and treatment and to aid in the development of new, sound and effective methods. Finally, he must have a sense of obligation to serve individual and community needs.

With these concepts representing its philosophy, the purpose of the college's School of Dentistry is to educate students to accept and to discharge competently the responsibilities of preserving individual and community health.

Objectives

The School of Dentistry has set before it the objectives of teaching, research and service that are common to all institutions of higher learning. In specific relation to the School of Dentistry they may be stated as:

1. To educate dentists and the broad spectrum of allied personnel required to provide for the present and future oral health needs of the total community.
2. To foster and conduct active research programs in basic and applied areas of dentistry as well as supporting experimentation and innovations in the art and science of dental education.
3. To provide preventive, diagnostic, and therapeutic dental services to citizens of the State of Georgia in cooperation with other health and educational related organizations, and in accordance with the available physical facilities and teaching faculty of the School of Dentistry.

Fees and Expenses

Estimated Student Expenses per Academic Year

	First Year	Second Year	Third Year	Fourth Year
*Matriculation fee	$1155	$1155	$1155	$1155
**Student Health fee	30	30	30	30
***Student Activity fee	30	30	30	30
Books	300	200	50	50
Instruments	2200	1200	85	----
Uniforms	30	30	30	30
TOTAL	$3745	$2645	$1380	$1295

(All fees are subject to change)

*Non-Resident tuition (in addition to matriculation fee) is $385 per quarter.
**Student Health fee is $10 per quarter.
***Student Activity fee is $10 per quarter.

Estimated housing, food and personal expenses were not included due to general individual variance. In developing a personal budget, do not fail to include these items. Information on hospitalization and life insurance is in the General Information section.

Admission Requirements

1. American Dental Association Admissions Test (given in October, January and April)
2. Personal interview by invitation
3. Two years of college is a minimum, including completion of ten quarter hours (six semester hours) of the following college courses:

   Inorganic Chemistry with lab
   Organic Chemistry with lab
   Biology (or Zoology) with lab
   Physics with lab
   English

Great emphasis will be placed on academic performance during selection procedure. Majors in social sciences, psychology and humanities will be given equal consideration with those in biology and physical sciences.

Application Procedures

Admission to the School of Dentistry is on a competitive basis. The Admissions Committee selects the applicants who seem best qualified for

the study of dentistry from among those who apply. Application forms will be available July 1 in the Office of Student Affairs. No application can be considered if received after Feb. 1 of the year of matriculation.

Financial Aid

The Office of Financial Aid has prepared a Bulletin outlining its financial aid program, as well as other programs of assistance not directly administered by the college. This may be obtained along with application materials by writing:

Office of Financial Aid
Medical College of Georgia
Augusta, Georgia 30901

Applications for aid are separate from admission applications, i.e. one need not be officially accepted for admission before applying for assistance. Application materials should be submitted by May 1 prior to enrollment, although later applications will be processed on a "late" basis.

Curriculum

Design and Emphasis

The pre-doctoral curriculum leading to the D.M.D. degree offered by the Medical College of Georgia School of Dentistry will require twelve academic quarters in four calendar years. This has been changed from three calendar years. Exceptional students may be graduated in eleven quarters to allow for summer enrollment in post-graduate programs and internships. The curriculum will initially emphasize the basic sciences with an expanding emphasis upon the clinical sciences. Courses in the fundamental principles within each basic science discipline, coupled with early clinical exposure, will enable the student to make a lasting correlation of the basic and clinical sciences. The student's knowledge and familiarity with the basic sciences will be reinforced with applied courses in each discipline . This early and continuing correlation is designed to educate the student to respect biological systems and to develop a basic understanding of the response of tissue to stimuli.

The expanding health needs of society will be interrelated throughout the curriculum. Courses relating to principles of public health dentistry, epidemiology of caries and periodontal disease, statistical methods, behavioral aspects of patient populations, dental ethics and jurisprudence will be a meaningful part of the curriculum. Practical field experiences will be arranged for dental students in epidemiologic, preventive and other appropriate community activities. Preventive dentistry will be the over-riding theme of all clinical disciplines.

Individual Student Development

Each student will have opportunities for development and expression in specific areas of his interest and ability. Three weeks will be set aside each year in which elective courses and other structured situations will be available to students interested in academic pursuits. Students will be encouraged to contribute to the field of research and education. Those students demonstrating superior clinical ability and interest will be challenged with more complex technical and clinical problems. The student with motivation in the social aspects of the profession will be further challenged in preventive and community dentistry projects.

The Student and The Health Team

The use of auxiliary personnel will be stressed as a realistic method of preparing the student for the efficient practice of dentistry. The clinical design will simulate a group practice environment with dental assistants, hygienists and technicians playing an active role in comprehensive patient care. The close academic and physical relationship with the School of Medicine and the teaching hospital will provide an awareness of associated medical sciences and hospital orientation throughout all four years. This emphasis is desirable in preparing the student not only for contemporary practice, but for the future evolution of the profession.

The Student and Research

The dental student will have opportunity to participate in faculty research projects in both basic and clinical areas. He will be encouraged to design and carry out projects of his own as well. The student also will be encouraged to participate in graduate, post graduate and continuing education courses offered at the college and other dental schools within the United States as a part of the elective program.

Methods of Instruction

The curriculum of the School of Dentistry will be structured around a learning-oriented environment rather than the traditional teaching-oriented situation. Seminars and conferences, taking precedence over the lecture as a vehicle to stimulate

independent thought, will give opportunity for expression and interchange upon the part of each student. Self-instructional materials will be used whenever possible to individualize instruction and preparation.

Curriculum Information

Four-Year Curricular Calendar

NOTE: Hours shown are actual clock hours. From the time assigned to the basic science courses, 6 hours per quarter (Quarters 1 through 9 inclusive) will be used to provide Bioclinical Seminars. This curriculum is subject to change at the discretion of the School of Dentistry.

Quarter	Course No.	Department/Discipline	Hours/ Week	Class Hours	Exam Hours	Total Hours
1	CMD 511	Community Dentistry	N/A	40	–	40
(Fall)	ANMD 511	Anatomy	5	50	4	54
	ANMD 513	Anatomy	5	50	4	54
	BCM 510	Biochemistry	6	60	2	62
	OCC 511	Occlusion	8	80	5	85
	OCC 512	Occlusion	8	80	5	85
			32	360	20	380
2	BCM 511	Biochemistry	5	55	2	57
(Winter)	ANMD 515	Anatomy	4	44	4	48
	ANMD 517	Anatomy	5	55	3	58
	DAU 511	Team/DAU	1	11	1	12
	OPD 511	Restorative	8	88	4	92
	PER 511	Periodontics	2	22	1	23
	OMD 511	Oral Medicine	2	22	1	23
	OCC 522	Occlusion	5	55	5	60
			32	352	21	373
3	CMD 520	Community Dentistry	N/A	40	–	40
(Spring)	OCC 517/517C	Occulsion	5	50	1	51
	NS 514	Physiology	5	50	4	54
	DPS 511	Dental Materials	1	10	1	11
	OMD 512	Oral Medicine	2	20	1	21
	OMTP 513	Oral Medicine	1	10	1	11
	PER 512	Periodontics	3	30	1	31
	COM 520	Prosthodontics	7	70	–	70
	RADD 513	Radiology	2	20	2	22
	OPD 512	Restorative	8	80	4	84
			34	380	15	395
SUMMER BREAK						
4	MIBD 522	Microbiology	4	44	2	46
(Fall)	PHYD 513	Physiology	5	55	3	58
	DPS 520	Dental Materials	1	11	1	12
	OMTP 521	Oral Medicine	1	11	1	12
	OSD 513	Oral Surgery	2	22	2	24
	PER 513	Periodontics	1	11	1	12
	COM 520	Prothodontics	7	77	10	87
	OPD 514	Restorative	11	121	8	129
			32	352	28	380
	CPM	Clinical Practice Management	4	44	–	44
			36	396	28	424

Quarter	Course No.	Department/Discipline	Hours/ Week	Class Hours	Exam Hours	Total Hours
5	MIBD 523	Microbiology	4	44	2	46
(Winter)	PHYD 520	Physiology	4	44	3	47
	PATH 522	Pathology	5	55	–	55
	DPS 512	Dental Materials	1	11	1	12
	ENDO 521	Endodontics	5	55	4	59
	FIX 522	Restorative	8	88	–	88
	OBIO 523	Oral Biology	2	22	2	24
			29	319	12	331
	CPM	Clinical Practice Management	7	77	–	77
			36	396	12	408
6	OSD 532	Oral Surgery	2	22	2	24
(Spring)	ANMD 532	Anatomy	6	66	4	70
	PATH 532	Pathology	4	44	4	48
	OCC 523	Occlusion	2	22	1	23
	FIX 522 Cont'd	Restorative	5	55	4	59
	RPD 523	Prosthodontics	11	121	2	123
	PER (New #)	Periodontics	1	11	1	12
	OMTP 532	Oral Medicine	1	11	1	12
			32	352	19	371
	CPM	Clinical Practice Management	7	77	–	77
			39	429	19	448
	(Mandatory Summer Clinic 8 weeks)					
7	CMD 530	Community Dentistry	N/A	24	–	24
(Fall)	PATH 523	Pathology	5	50	2	52
	PHMD 521	Pharmacology	4	40	2	42
	OBIO (New #)	Oral Biology	2	20	2	22
	PER 522	Periodontics	1	10	1	11
	OSD 534	Oral Surgery	2	20	2	22
	OMD 531	Oral Medicine	1	10	1	11
	OMTP 523	Oral Medicine	1	10	1	11
	FIX 531	Restorative	8	80	4	84
			24	264	15	279
	CPM	Clinical Practice Management	14	140	–	140
			38	404	15	419
8	PATH 531	Pathology	3	33	2	35
(Winter)	PHMD 531	Pharmacology	4	44	2	46
	OBIO (New #)	Oral Biology	2	22	2	24
	PER 523	Periodontics	1	11	1	12
	ORTHO 521/33	Orthodontics	3	33	3	36
	PRO 533	Prosthodontics	4	44	1	45
	DAU 532	Team/DAU	1	11	1	12
	PEDO 522	Pedodontics	7	77	2	79
			25	275	14	289
	CPM	Clinical Practice Management	15	165	–	165
			40	440	14	454

Quarter	Course No.	Department/Discipline	Hours/ Week	Class Hours	Exam Hours	Total Hours
9	ENDO 533	Endodontics	1	11	1	12
(Spring)	OPD 513	Restorative	4	44	5	49
	OMPO 533	Oral Medicine	2	22	2	24
	TEAM 532	Team/DAU	2	22	2	24
	OMTP 541	Oral Medicine	1	11	1	12
	OMD 532	Oral Medicine	3	33	1	34
	OSD 541	Oral Surgery	3	33	2	35
	PATH 542	Pathology	3	33	1	34
			19	209	15	224
	CPM	Clinical Practice Management	21	231	8	239
			40	440	23	463
	Mandatory Summer Clinic (8 Weeks)					
10	OMPO 541	Oral Medicine	2	22	–	22
(Fall)	PER 542	Periodontics	2	22	1	23
	Seminar I	Restorative	1	11	1	12
	OMD 533	Oral Medicine	3	33	2	35
			8	88	4	92
	CPM	Clinical Practice Management	32	352	24	376
			40	440	28	468
11	OMPO 542	Oral Medicine	1	10	–	10
(Winter)	Seminar II	Restorative	1	10	1	11
	CMD 540	Community Dentistry	N/A	24	–	24
	CS (ENDO)	Clinical Seminar	1	10	1	11
	OBIO (Nerve)	Oral Biology	1	10	1	11
	OCC 533	Occlusion	2	20	1	21
			6	84	4	88
	CPM	Clinical Practice Management	34	340	32	372
			40	424	36	460
12	CS 542	Clinical Seminar	3	27	–	27
(Spring)	Seminar III	Restorative	1	9	–	9
			4	36	–	36
	CPM	Clinical Practice Management	36	324	–	324
			40	360	–	360

Student Evaluation and Graduation

Student academic and clinical performance is regularly evaluated by the course director for each individual course offered by the School of Dentistry. In addition, the overall academic progress of each student is regularly reviewed by a faculty committee. This committee recommends all student promotions, individual curriculum adjustments, remedial action where an unsatisfactory grade is given and graduation.

Any student may be denied permission to continue enrollment in the School of Dentistry if in the opinion of the faculty, the student's knowledge, character or mental or physical fitness cast grave doubts upon his/her potential capacities as a dentist.

Advanced Education (Dental Residency Programs)

Post doctoral programs in dental disciplines are designed to bring dentists to a superior level of biologic and technical education and clinical experience. This is necessary to provide oral health care for those patients with unusually complex and challenging oral health problems. Training in

research and in teaching gives additional breadth and stature to the graduate and equips him/her to contribute more effectively to the solution of problems confronting society and the profession.

The Medical College of Georgia is an equal opportunity institution and encourages applications from all interested persons.

Descriptions of Advanced Education Programs

Endodontics

Dr. Robert J. Michelich, Program Director

The major objective of the Endodontic residency program is to provide post graduate training in Endodontics and to fulfill the specialty requirements as set forth by the American Dental Association, the American Association of Endodontists and the American Board of Endodontics. This is achieved by the in-depth study of pertinent areas of basic science and correlation of the patho-physiologic processes with the clinical problems encountered in the field of Endodontics. The resident is completely familiarized with the problems of a differential diagnosis and the treatment of pathosis of pulpal origin; provided clinical experiences in the routine and complicated procedures encountered in the field of Endodontics, and provided training and experience in research design and methodology.

The program will permit flexibility to adapt to individual experiences and objectives for the career development of each resident.

Oral Surgery

Dr. Edwin D. Joy, Program Director

Advanced education in Oral Surgery is a three-year, non-degree, post doctoral program designed to satisfy the educational requirements of the American Board of Oral Surgery. The study of the biomedical sciences as they relate to oral surgery are presented throughout the three years in the form of regularly scheduled weekly instructional courses, conferences and seminars and during rotations on the medicine, anesthesia, and neurosurgery services. All residents are engaged in a research or publication project culminating in a report suitable for publication.

Orthodontics

Dr. Eugene H. Williamson, Program Director

The residency program in the Department of Orthodontics is of 24-30 months duration. Successful completion of the program fulfills the specialty training requirements set forth by the American Dental Association, the American Association of Orthodontists and the American Board of Orthodontics. The curriculum consists of a nucleus of orientation courses that are given annually and supplementary courses that are repeated in a biennial cycle. Experience is provided in both the Edgewise and Begg appliance systems. The over-all program emphasizes critical analysis of the literature, differential diagnosis, technical excellence and critical evaluation of treatment results. Interdisciplinary patient management is provided in cooperation with other residency programs within the school. The writing of a scientific article of publishable quality based on clinical research is required.

A Master of Science degree is available under the direction of the Oral Biology Department requiring additional time in residency.

Pedodontics

Dr. David R. Myers, Program Director

The advanced education program in Pedodontics is a two year certificate program designed to satisfy the education requirements of the American Board of Pedodontics. The program emphasizes the clinical treatment of both out-patients and hospitalized in-patients. The study of the biomedical sciences as they relate to pedodontics are presented throughout the two years in the form of regularly scheduled weekly instructional courses, conferences and seminars and during rotations on the pediatric and anesthesia services. All residents are required to complete a research project culminating in a report suitable for publication.

Periodontics

Dr. Jerry J. Garnick, Program Director

The residency program in periodontics provides the post doctoral student with the biological and scientific background to treat all forms of periodontal disease on a rational basis. The student becomes thoroughly familiar with the periodontal literature and receives broad clinical experiences in examination, prognosis and all accepted modes of treatment of periodontal diseases. He is encouraged to continue his learning experiences after completion of the program by means of the critical review of the literature and experiences in clinical research. Hospital dentistry and a varied patient population are achieved through affiliation with Talmadge Memorial Hospital, University Hospital and Gracewood State School and Hospital.

The Periodontal Residency Program fulfills the requirements set by the American Dental Associa-

tion and graduates are qualified to take the examination of the American Board of Periodontology.

Perio-Fixed Prosthodontics

Dr. J. Marvin Reynolds, Program Director

This program is designed to integrate periodontal, restorative and prosthodontic treatment at an advanced level. It will provide a broad and in-depth understanding of the nature and causes of periodontal disease, the rationale of periodontal treatment and the subsequent restoration of the dentition. Students will receive a full academic year of didactic and clinical education in periodontics with seminars and literature review continuing through the remaining part of the program. The prosthodontic portion includes clinical and didactic training in complete dentures, fixed and removable partial dentures and maxillofacial prosthesis with the major emphasis on fixed prosthodontics. Residents who successfully complete this program will be educationally qualified to apply for examination by the American Board of Prosthodontics.

Prosthodontics

Dr. Ross H. Hill, Program Director

The advanced education program in Prosthodontics includes clinical and didactic training in complete dentures, fixed and removable partial dentures and maxillofacial prosthodontics with an emphasis on removable prostheses. There is also an affiliation with the University Hospital. Successful completion of this program qualifies the resident to be examined by the American Board of Prosthodontics.

Any of the above post graduate programs can be offered simultaneously with a M.S. in the Oral Biology Program.

Course Descriptions

Certain courses listed show two numbers following the course titles, i.e., (44-1). These indicate clock hours-credit hours.

Clinical Practice Management

J. Brown; V. Johnson; C. Scruggs.

CPM 521. Clinical Practice Management. (44-1 hours) Prerequisites: Satisfactory completion of OCC 511, OCC 512, OCC 517, OCC 522, PER 511, PER 512, OPD 511, OPD 512, OMD 511, OMD 512, OMTP 513, RADD 513, and DAU 511.

The practice of dentistry in the clinic environment during which the student is evaluated on his participation, productivity, neatness and orderliness, and the maintenance of dental health records.

CPM 522. Clinical Practice Management. (77-1 hours) Prerequisites: Satisfactory completion of COM 520, OMTP 521, OSD 513, PER 513, OPD 514, and CPM 521.

The practice of dentistry in the clinic environment during which the student is evaluated on his participation, productivity, neatness and orderliness, and the maintenance of dental health records.

CPM 523. Clinical Practice Management. (77-1 hours) Prerequisites: Satisfactory completion of ENDO 521, FIX 522, and CPM 522.

The practice of dentistry in the clinic environment during which the student is evaluated on his participation, productivity, neatness and orderliness, and the maintenance of dental health records.

CPM 531. Clinical Practice Management. (140-1 hours) Prerequisites: Satisfactory completion of OCC 523, FIX 522 (cont'd), OSD 532, RPD 523, PER 520, OMTP 532, and CPM 523.

The practice of dentistry in the clinic environment during which the student is evaluated on his participation, productivity, neatness and orderliness, and the maintenance of dental health records.

CPM 532. Clinical Practice Management. (165-1 hours) Prerequisites: Satisfactory completion of PER 522, OSD 534, OMD 531, OMTP 523, FIX 531, PHMD 521, and CPM 531.

The practice of dentistry in the clinic environment during which the student is evaluated on his participation, productivity, neatness and orderliness, and the maintenance of dental health records.

CPM 533. Clinical Practice Management. (231-1 hours) Prerequisites: Satisfactory completion of PER 523, PRO 533, DAU 532, PEDO 522, PHMD 531, and CPM 532.

The practice of dentistry in the clinic environment during which the student is evaluated on his participation, productivity, neatness and orderliness, and the maintenance of dental health records.

CPM 541. Clinical Practice Management. (352-1 hours) Prerequisites: Satisfactory completion of ENDO 533, OPD 513, TEAM 532, OMTP 541, OMD 532, OSD 541, and CPM 533.

The practice of dentistry in the clinic environment during which the student is evaluated on his participation, productivity, neatness and orderliness, and the maintenance of dental health records.

CPM 542. Clinical Practice Management. (340-1 hours) Prerequisites: Satisfactory completion of PER 542, OMD 533, and CPM 541.

The practice of dentistry in the clinic environment during which the student is evaluated on his participation, productivity, neatness and orderliness, and the maintenance of dental health records.

CPM 543. Clinical Practice Management. (324-1 hours) Prerequisites: Satisfactory completion of OCC 533 and CPM 542.

The practice of dentistry in the clinic environment during which the student is evaluated on his participation,

productivity, neatness and orderliness, and the maintenance of dental health records.

Community Dentistry

(All Dental Courses Taught in One Time Block)

J. Willians, Chairman; J. Brooks; V. Della-Guistina; J. Zwemer.*

CMD 140 and 340. Introduction to Preventive Dentistry for Dental Hygiene. **(1-0-1 hour)**

CMD 511. Orientation to the Profession. **(3-0-3 hours)**

Dentistry as a profession is traced historically through major controversies. The contemporary challenges of dentistry and its future directions are discussed. Vocational opportunities for the dentist are considered from the standpoint of scope, challenge, and satisfactions. Community clinics, family homes, and dental offices are visited to illustrate the didactic information discussed in the classroom.

CMD 520. Epidemiology and Biostatistics. **(3-0-3 hours)**

The history and principles of epidemiology are addressed with illustrations from studies involving the control of dental caries. Practical experience is gained through the performance of educational, preventive, and research activities upon elementary school children. Fundamental statistical procedures are used to summarize and analyze the results of the field data. Students present conclusions of field studies orally as scientific reports.

CMD 530. Practice Location and Dental Care Delivery. **(2-0-2 hours)**

Formal presentations and student teams are utilized to address the two subject areas. Students are assisted in choosing a practice location through personal involvement with prospective communities. Various modes of dental care delivery are explored. Findings and conclusions of the students are presented at the close of the course utilizing the techniques of role-playing, video tape, and panels.

CMD 540. Dental Jurisprudence and Ethics. **(2-0-2 hours)**

Both formal presentations and student teams are utilized to address the two subject areas. Opportunities are provided for students to gain practical experience in the subject areas through assigned topics. At the close of the course, findings and conclusions of the students are presented using the techniques of mock trial, role-playing, video tape, and panels.

CMD 805. Dental Health Delivery in a Changing Society. **(4-0-5 hours)**
(Graduate Course for candidates for the Masters Degree in Dental Hygiene)

An elective course designed to explore the continuing influence of society upon the dental profession. Related factors of dental need, manpower, and methods of payment will be addressed. Practical applications to the discipline of Dental Hygiene will be made.

ENR 520 and ENR 530. Dental Electives. **(5 credit hours)**

A four-week block of electives offered each summer for the personal enrichment of both students and faculty. Students may elect a faculty-designed course(s) from the catalog or may self-design their own course with faculty consultation and supervision.

*Special Appointment.

Dental Materials

K. Anusavice; C. Fairhurst; T. Okabe.

DPS 511. Dental Materials I. **(1-0-1 hours)**

The physics, chemistry and metallurgy of dental amalgam, composites and cement bases previously used in OPD 511. The effects of manipulation by the dentist upon the physical and chemical properties will be studied.

DPS 520. Dental Materials II. **(1-0-1 hours)**

A continuation of DPS 511. The materials under study in this course are impression materials, gypsum materials, denture waxes, denture base resins, and artificial teeth which were introduced to the student in COM 520. Cutting, grinding, and polishing of materials will also be discussed.

DPS 521. Dental Materials III. **(1-0-1 hours)**

A continuation of DPS 520. The materials under study in this course are impression materials used in fixed prosthetics, inlay wax, die materials, casting investments, gold alloys and solders used in OPD 514.

In addition, materials used in preventive dentistry such as pit and fissure sealants will be discussed.

DPS 121 and DPS 321. Dental Materials for Dental Hygiene. **(1-0-1 hours)**

These lectures will cover the effect of manipulation and handling on the properties of dental materials used in preventive, restorative, and prosthetic dentistry. The sequence of lectures follows the dental materials laboratory so that the students may become familiar with the topics before they attend each lecture. Chemical and physical characteristics of dental materials, which are essential to dental hygienists, will be discussed.

Endodontics

R. Walton, Chairman; J. Goldstein; R. Michelich.

ENDO 521. Fundamentals of Endodontics—Preclinical Course. **(3-1-4 hours)**

The basic lecture and laboratory course which presents diagnosis, treatment planning, treatment implementation of dental pulp pathosis from coronal access. Prevention of pulp disease and pulp protection is stressed.

ENDO 533. Advanced Endodontics. **(1-0-1 hours)**

Includes presentation of endodontics as a specialty, its history, surgical procedures and management of complications and dental emergencies. Special considerations in restoration of endodontically treated teeth are covered.

ENDO 542. Endodontics Seminar. (1-0-1 hours)
Discussion of endodontic literature, review of management of dental emergencies and selected topics of special current interest.

Occlusion

G. Loft; D. Lundquist; M. Reynolds.

OCC 514. Introductory Occlusion. (4-12-10 hours)
The lectures describe in detail tooth morphology and correlate this to mandibular movements. Movement is described in the frontal, saggital and horizontal planes. The effects of different movements on cusp placement, cusp height and ridge and groove direction are demonstrated.
The laboratory experiences apply this knowledge to practical waxing procedures with emphasis on improving digital dexterity and tri-dimensional spatial visualization.

OCC 522. Occlusion for Artificial Dentition. (1-4-4 hours)
Prerequisite: OCC 514
Lectures and laboratory experiences determine the spatial relations of an artificial dentition. A bilateral balanced occlusion is established using a tooth form with cusps and a neutrocentric occlusion with a tooth form without cusps.

OCC 517. Occlusal Equilibration. (1-2-2 hours)
Prerequisite: OCC 522
Lectures and laboratory procedures demonstrate the techniques required for evaluating the occlusion of a natural dentition and establishing the intercuspal position coincidental with the retruded contact position.

OCC 517C. Occlusal Equilibration (Clinical) (1-2-2 hours)
Prerequisite: OCC 522
A clinical experience utilizing the principles of diagnosis, evaluation and occlusal equilibration to obtain a physiologic occlusion for one patient.

OCC 523. Evaluation of Registration. (1-1-2 hours)
Prerequisite: OCC 517
Lectures and clinical experiences to determine the accuracy of various methods and materials used in registering maxillo-mandibular relations.

OCC 532. Occlusion Seminar. (2-0-2 hours)
Prerequisite: OCC 523
An in-depth review of current and classic articles in the literature related to occlusion with particular emphasis on TMJ dysfunction and treatment.

OCC 541C. Clinic. (0-2-1 hours)
Prerequisite: OCC 517C
A clinical experience utilizing the principles of diagnosis, evaluation and occlusal equilibration to obtain a physiologic occlusion for three patients.

CS 543. Clinical Seminar. (3-0-3 hours)
Each student prepares a case presentation describing the diagnosis, treatment plan and sequence of treatment to accomplish the comprehensive care of a patient. Maximum utilization is made of audio-visual equipment during the presentation.

Oral Biology—Anatomy

J. Boshell; I. Hawkins*; F. Lake; N. O'Dell; M. Sharawy; R. Walton*.

ANMD 511. General Microanatomy and Embryology. (4-1-5 hours)
Prerequisite: College Biology
This course provides an in-depth study of the cytology and histology of the primary tissues. Tissues from the oral cavity are used for laboratory studies. The course includes ten hours of general human embryology and stresses the development of the orofacial structures. The objectives of the course are to correlate the structure and function of cells and tissues to clinical dental problems.

ANMD 513. Applied Head and Neck Anatomy. (1-3-4 hours)
Prerequisite: ANMD 511
In this course, the lectures (30% of total time) correlate the anatomical information learned in the laboratory (70% of total time) to clinical problems, and also ties the regional approach of laboratory anatomy to a systemic physiological anatomy. The students are required to satisfactorily dissect the head region. Models and movies on prodissections are available to supplement dissection.

ANMD 515. Applied Head and Neck Anatomy. (1-3-4 hours)
Prerequisite: ANMD 513
This course is a continuation of ANMD 513, in which the students dissect the superficial and deep structures of the neck region. Correlation of the anatomical information learned to clinical problems is emphasized and practiced by students during the course.

ANMD 517. Dental and Systemic Histology. (4-1-5 hours)
Prerequisite: ANMD 511
This course consists of lectures, laboratories and clinical conferences which are designed to emphasize the functional microanatomy of human organs. Forty percent of the allotted course time is used to study the applied microanatomy of the oral and perioral tissues. Emphasis is placed on the correlation of the basic science information with clinical dental problems.

ANMD 532. Systemic Anatomy. (2-2-5 hours)
Prerequisites: ANMD 513 and 515
The students through laboratory dissection, study of models and movies on prodissection, learn the anatomical organization of axilla, thorax, abdomen, pelvis, axilla, upper and lower extremities. The dissection manual and the lectures help the students in studying the human body on a systemic basis. Clinical correlation is emphasized throughout the course.

NS 514. Neural Sciences. (4-1-5 hours)
Prerequisites: ANMD 511, 513, 515, and 517
This course is presented jointly by the divisions of Anatomy and Physiology of the Department of Oral Biology and by the Department of Oral Surgery. It deals with the structure and function of the nervous system. The course consists of lectures, laboratories, and bioclinical seminars. The basic science information is cor-

related to neuropathies of dental interest whenever applicable.

OBIO 811. Head and Neck Anatomy. (2-0-2 hours)
This advanced course is designed to treat in depth various topics, of dental interest, in the area of applied anatomy of the head and neck region. As an introduction to the course an overview of the descriptive head and neck anatomy will be given. The developmental anatomy of the face, common congenital anomalies and experimental teratogenesis will be presented. The study of the radiologic anatomy of the head including cephalometry and angiography is planned. Functional anatomy of the mechanisms of mastication, deglutition, taste and the methodology involved in their study will be presented. Neural pathways related to various neuralgias, toothache and headache will be discussed. The surgical anatomy of fascia, lymphatics and tempro-mandibular joint will be described. At the end of the course, presentation of recent advances in the ultrastructure of epithelium, connective tissue, muscle, and nerves are planned.

ANM 132 and 332. Anatomy and Physiology for Dental Hygiene. (6-0-6 hours)
This course is designed to teach the microanatomy of human tissues with emphasis on the teeth, oral mucosa and salivary glands. Moreover, the gross anatomy of human organ systems is presented briefly. Emphasis is placed on the muscles of facial expression, muscles of mastication, and the blood and nerve supply to the oral and perioral tissues. In addition, programmed learning packages on membrane, muscle, nerve, cardiovascular, respiratory, and endocrine physiology are used.

*Joint Appointment.

Oral Biology—Biochemistry

S. Bustos-Valdes; T. Dirksen; J. Erbland; W. Karp*.

BCM 510. Biochemistry for Dentistry. (6-0-6 hours)
Prerequisite: Predental Courses
Biochemistry for Dentistry initially concerns itself with the chemical components of the body. Emphasis is placed upon molecular and biochemical concepts of dentistry. Lectures include structure and function of proteins and the chemistry and metabolism of carbohydrates and lipids. A bioclinical seminar on the biological effects of alcohol is offered.

BCM 511. Biochemistry for Dentistry. (5-0-5 hours)
Prerequisite: BCM 510
This course continues the study of the chemical components of the body. Bioclinical seminars on diabetes and obesity are offered. Lectures include the chemistry and metabolism of nucleic acids, protein synthesis, digestion and absorption, the role of vitamins at the molecular level, the chemistry and metabolism of calcified tissues, muscle contraction, and blood clotting mechanisms.

OBIO 523. Cariostatic Mechanisms of Fluoride. (2-0-2 hours)
Prerequisite: Oral Biology Courses to Date
This course provides an overview of our current understanding of how fluoride inhibits caries formation. Areas covered will include the influence of fluoride on plaque formation, bacterial metabolism, and remineralization. Other areas for discussion are a historical perspective, distribution of enamel, salivary transport, methods of delivery, arguments of antifluoridationists, soft tissue metabolism, and toxicity.

OBIO 531. Clinical Laboratory Procedures. (2-0-2 hours)
Prerequisite: Oral Biology Courses to Date
This course covers various fundamental biochemical and microbiological laboratory testing procedures which are suitable for utilization in the routine practice of dentistry.

OBIO 532. Biological Effects of Radiation. (2-0-2 hours)
Prerequisite: Oral Biology Courses to Date
A survey of the biological effects of radiations and the evaluation of associated hazards and appropriate protective measures. Those aspects of special concern to the practicing dentist are emphasized.

OBIO 541. Cranial Nerve Testing. (1-0-1 hours)
This course complements the neural sciences course offered during the first year of the dental curriculum. The course consists of lectures and bioclinical seminars on the neurological examination, structures and functions of cranial nerves and cranial nerve disorders of interest to dentistry.

OBIO 822. Oral Biochemistry—Graduate Course. (2 hours)
The biochemistry of structural and non-structural components of the body as related to oral health and disease.

BIO 131-331. Dynamic Biochemistry of Living Systems I. (3-0-3 hours)
Prerequisite: Dental Hygiene Student
This course reviews organic and inorganic chemistry as it relates to dental hygiene. A basic understanding of chemical principles is developed as a prerequisite to the study of biochemistry and nutrition. Inorganic and organic chemicals used in dentistry are emphasized.

BIO 132-332. Dynamic Biochemistry of Living Systems II. (3-0-3 hours)
Prerequisite: BIO 131-331
This course stresses basic biochemical principles relating to dentistry and nutrition. Biochemical mechanisms of drug interactions and the biochemical basis of disease are stressed. Also discussed are the metabolic role of vitamins and the major foods as a key to sound nutritional counseling.

*Part-time.

Oral Biology—Bioclinical Seminars

BCS 511. Bioclinical Seminar. (2-0-0 hours)
This is the first in the freshman series of bioclinical seminars that are designed as interdisciplinary courses to integrate basic biology and the clinical sciences. This course correlates inflammation and periodontal disease.

BCS 512. Bioclinical Seminar. (2-0-0 hours)
This is the second in the freshman year bioclinical seminar series and presents the biological and clinical aspects of diabetes and the role of the dentist concerning this disease.

BCS 513. Bioclinical Seminar. (2-0-0 hours)
This, the third in the first year dental student bioclinical seminar series, is a presentation of various current research projects being conducted by students and faculty and is intended to acquaint the student with dental research.

BCS 521. Bioclinical Seminar. (2-0-0 hours)
This is the first seminar in the second year series and the topics relate to muscle physiology specifically in relation to deglutation, and related clinical problems.

BCS 522. Bioclinical Seminar. (2-0-0 hours)
This is the second seminar in the second year series. The topics cover the Immunological Basis of Oral Disease, correlating the basic biology to the clinical aspects.

BCS 523. Bioclinical Seminar. (2-0-0 hours)
This is the third seminar in the second year series. The discussions are centered on genetic diseases and their oral implications, emphasizing the basic concepts of developmental biology in relation to clinical diseases.

Oral Biology—Microbiology

J. Bulkacz; G. Schuster; K. Volkmann.

MIBD 522. Oral Microbiology and Infectious Disease I. (5-0-5 hours)
Lectures on microbiology and immunology including microbial physiology, metabolism, genetics and mechanism of pathogenesis, and basic principles of immunology and immunological responses.

MIBD 523. Oral Microbiology and Infectious Disease II. (4-0-4 hours)
Prerequisites: Biochemistry 510, 511, MIBD 522
Lectures and laboratory on infectious diseases with special emphasis on those with oral manifestations. The laboratories provide experiences in application of microbiology to the practice of dentistry.

MIB 130-301. Microbiology for Dental Hygienists. (4-0-4 hours)
Prerequisite: Biochemistry
Lectures on principles of microbiology, immunology and infectious disease and their applications to the practice of dental hygiene.

MIB 200-201. Microbiology for Dental Assistants. (4-0-4 hours)
Lectures and demonstrations on fundamental principles of microbiology, aseptic procedures, and sterilization and disinfection for dental assistants.

Oral Biology—Pharmacology

A. Ciarlone; B. Fry; L. Gangarosa; A. Jeske.

PHMD 521. General Pharmacology. (4-0-4 hours)
Prerequisites: Biochemistry and Physiology
PHMD 521 is a general course in Pharmacology for dental students serving as a foundation for understanding of pharmacotherapeutics and medical drugs which dental patients use. This course emphasizes principles of drug action; drug categories are studied in detail using a systemic approach including nervous system (autonomic and central), cardiovascular, renal, hematological, endocrine and G.I. This course or its equivalent is a prerequisite for PHMD 531.

PHMD 531. Dental Therapeutics. (4-0-4 hours)
Prerequisite: PHMD 521
PHMD 531, Dental Therapeutics, is a continuation of PHMD 521 with an emphasis on drugs used by dentists. Posology and prescription writing are emphasized. Topics covered are drugs used for chemotherapy of infection and for control of pain including the psychological aspects of patient care. In addition, special problems in drug therapy of oral tissues are emphasized.

PHM 230 and PHM 430. Dental Hygiene Pharmacology. (4-0-4 hours)
Prerequisites: Human Anatomy and Physiology and Biochemistry
A basic pharmacology course that includes: 1) general principles, 2) a study of drugs commonly used to treat diseases and disorders of the nervous, cardiovascular-renal, gastrointestinal, and endocrine systems, and 3) consideration of antibiotics and chemotherapy. Special empahsis is placed on drugs used in dentistry and also on how certain drugs affect the treatment and response of the dental patient.

Oral Biology—Physiology

D. Pashley; J. Weatherred; G. Whitford.

PHYD 513. Human Physiology. (4-0-0 hours) (Progress Grade)
Prerequisites: Anatomy, Histology and Biochemistry
An integrated study of the functional systems of the human body ranging from molecular interaction to organismic behavior. Special emphasis is placed on those principles and concepts related to dental practice.

PHYD 520. Human Physiology. (4-0-8 hours)
Prerequisite: PHYD 513
Continuation of PHYD 513.

See Offerings in Other Departments and Schools:
NS 514. Neural Sciences.
ANM 132-332. Anatomy and Physiology for Dental Hygiene.
OBIO 523. Cariostatic Mechanisms of Fluoride.
OBIO 833. Physiology of the Stomatognathic System.
PHY 803. Peripheral Circulation.

Oral Medicine

B. Rice, Chairman; H. Merchant; R. Wynn.

OMD 511. Oral Diagnosis I. (2-0-2 hours)
An introduction to the technique of oral physical examination and collection of diagnostic data. The student is introduced to patient management in the clinic.

OMD 512. Oral Diagnosis II. (2-0-2 hours)
Prerequisite: OMD 511
The techniques of physical examination routinely performed in a dental office are described and practiced. The collection and correlation of all pertinent health data and its importance in the diagnostic process is discussed.

OMD 531. Nutrition. (1-0-1 hours)
Prerequisites: Biochemistry, Physiology, Anatomy
Various aspects of nutritional counseling with patients are practiced. Some of the major nutritional problems encountered in the clinical practice of dentistry are discussed.

OMD 532. Oral Medicine I. (3-0-3 hours)
Prerequisites: Biochemistry, Anatomy, Microbiology, Physiology, OMD 511, OMD 512
This course considers the oral manifestations of systemic disease and the effect of oral disease on systemic health.

OMD 533. Oral Medicine II. (3-0-3 hours)
Prerequisite: OMD 532
This is a continuation of OMD 532 largely in a problem solving format.

OMD 522C. Clinic.
This is the clinical component of Oral Diagnosis and Treatment Planning. The student carries out the oral physical examination, history taking, and other diagnostic procedures indicated for the patients which have been assigned through the office of the Coordinator of Patient Care. In this clinical activity the student has the opportunity to put into practice the principles previously presented in his didactic courses.

OMD 531C. Clinic.
Prerequisite: OMD 522C
This is a continuation of the diagnostic and treatment planning procedures carried out for patients with oral disease problems of increasing complexity.

OMD 533C. Clinic.
Prerequisites: OMD 522C, OMD 531C
This is a continuation of the diagnostic and treatment planning procedures carried out for patients with oral disease problems of increasing complexity.

OMD 542C. Clinic.
Prerequisites: OMD 522C, OMD 531C, OMD 533C
This is a continuation of the diagnostic and treatment planning procedures carried out for patients with oral disease problems of increasing complexity.

OMPO 533. Practitioner Orientation I. (2-0-2 hours)
This course is an introduction to the fundamental principles of practice administration.

OMPO 541. Practitioner Orientation II. (2-0-2 hours)
Prerequisite: OMPO 533
A continuation of the principles of practice administration. The student is required to prepare a written statement on his philosophy of practice.

OMPO 542. Practitioner Orientation III. (1-0-1 hours)
Prerequisites: OMPO 533, OMPO 541
A continuation course on the principles of practice administration. The student is required to prepare a detailed manual of practice procedures. This can be utilized as a training manual.

OMTP 513. Principles of Treatment Planning I. (1-0-1 hours)
This course is an introduction to the principles of treatment planning. The fundamental requirements of proper oral therapy are presented.

OMTP 521. Principles of Treatment Planning II. (1-0-1 hours)
Prerequisite: OMTP 513
This is a continuation of the principles of treatment planning. Practice is begun in applying the principles to clinical problems.

OMTP 522. Principles of Treatment Planning III. (1-0-1 hours)
Prerequisites: OMTP 513, OMTP 521
This is a continuation of principles of treatment planning as they apply to clinical problems. More complex types of problems are considered commensurate with the students progress in didactic courses.

OMTP 523. Principles of Treatment Planning IV. (1-0-1 hours)
Prerequisites: OMTP 513, OMTP 521, OMTP 522
This is a continuation of the previous course. Application of fundamental principles to increasingly complex problems is practiced.

OMTP 541. Principles of Treatment Planning V. (1-0-1 hours)
Prerequisites: All previous OMTP courses
This is a continuation of the clinical application of the principles of treatment planning.

CS 543. Clinical Seminar in Principles of Treatment Planning VI. (3-0-3 hours)
(Co-joint courses with the Department of Occlusion)
Prerequisites: All previous OMTP courses
Each student presents a fully documented case in which he has personally applied the principles of treatment planning.

OMD 140 and OMD 340. Nutrition. **(2-0-2 hours)**
Various aspects of nutritional counseling with patients are practiced. Some of the major nutritional problems encountered in the clinical practice of dental hygiene are discussed.

OMD 220 and OMD 420. Oral Medicine. **(2-0-2 hours)**
This course is designed to teach the hygienist to recognize deviations from normal, oral manifestions of systemic disease, and the effect of oral disease on systemic health.

Oral Pathology

S. Kolas, Chairman; R. McKinney; B. Singh.

PATH 522. General Pathology I. **(4-1-5 hours)**
Prerequisites: Histology, Biochemistry and Physiology
This course embodies the basic principles of disease and abnormal anatomy. Considerable attention is given to the understanding of the mechanisms underlying biological change at the cell and subcellular level. The parameters of cell injury, inflammation, carcinogenesis wound healing, living agents of disease, circulatory disturbances, and inborn errors of metabolism are studied in depth.

PATH 523. Oral Pathology I. **(5-0-5 hours)**
Prerequisites: Gross Anatomy, Embryology, Histology, General Pathology I, Biochemistry and Physiology
With the use of a problem solving oriented programmed test and lecture-discussion periods to reinforce learning, course objectives for the student include: an awareness and understanding of the etiology, pathogenesis and pertinent clinico-pathologic aspects of oral and paraoral disease; to establish a diagnosis, prognosis and general guidelines or suggestions for patient care. The various classes of pathoses include: benign premalignant and malignant neoplasms of oral and odontogenic origin; diseases and tumors of the salivary glands and bone; infectious diseases; oral manifestations of dermatologic diseases.

PATH 531. Oral Pathology II. **(3-0-3 hours)**
Prerequisite: Oral Pathology I
This course is a continuation of PATH 523 Oral Pathology I and employs the same educational format and general objectives. In addition, the biopsy diagnostic method is discussed. The specific classes of pathoses include: developmental disturbances; sequela to dental caries, i.e. pulpal and periapical disturbances and spread of dental infection; wound healing; oral injuries; reactive proliferations; regressive alterations and periodontal diseases.

PATH 532. General Pathology II. **(3-1-4 hours)**
Prerequisites: General Pathology I and Gross Anatomy (may be taken concurrently)
This course examines the disease processes that effect the various organ systems of the human body (not including the oral and perioral regions). Discussion centers around the etiology, pathogenesis, clinical implications and sequelae of various diseases. Disease alterations are examined at the gross and microscopic level in laboratory sessions. Correlation of systemic diseases of importance in dentistry are emphasized.

PATH 542. Oncology. **(3-0-3 hours)**
Prerequisites: General Pathology I and II and Oral Pathology I and II
This is a multidisciplinary lecture-discussion course including dental and medical aspects of the management of patients with head and neck tumors. The general objectives of the course are to provide the student with an awareness and understanding of oncologic diagnostic principles and particularly the principal modes of treatment including chemotherapy, radiotherapy, surgical care, reconstructive surgery, maxillo-facial prosthodontics and emotional reaction to cancer. Recent advances in cancer research are discussed.

DA 118. Pathology. **(2-0-2 hours)**
Prerequisites: Anatomy and Physiology
This course deals with the general principles, causes and underlying mechanisms of disease phenomena. The disease entities include cell injury, inflammation, neoplasia, cardiovascular and respiratory disease, disturbances of the genito-urinary system, disturbances of the breast and digestive system. Special attention is devoted to diseases of the oral cavity. These include: pulpal and periapical disturbances reactive and degenerative changes, developmental disturbances and odontogenic tumors and cysts. The educational format includes lectures, slide discussion and movies.

PATH 130 and PATH 330. Pathology. **(4-0-4 hours)**
Prerequisites: Anatomy, Biochemistry and Physiology
This course deals with the general principles and underlying mechanisms of disease phenomena. The disease entities include cell injury, inflammation, living agents of disease, neoplasia and metabolic disturbances. The causes, mechanisms and clinical implications of systemic diseases will be considered. Special attention is devoted to diseases of the oral cavity. These include: oral neoplasia, odontogenic tumors and cysts, salivary gland disturbances, bone diseases and pulpal and periodontal pathosis. The educational format includes lectures, slide discussion and movies.

Oral Surgery

E. Joy, Chairman; M. Elliott, W. Hammer; D. Tucker.

OSD 513. Local Anesthesia. **(2-0-2 hours)**
Prerequisites: Anatomy, Physiology
Local anesthesia is the introductory course in pain control and patient management. The pharmacology of local anesthetic agents is presented in detail. The clinical techniques of local anesthetic administration are presented in lecture and practiced in the laboratory.

OSD 532. Fundamentals of Oral Surgery. **(2-0-2 hours)**
Prerequisites: Local Anesthesia, Basic Sciences
The course consists of lectures designed to provide the student with basic information necessary to successfully complete clinical requirements in oral surgery and to subsequently perform those surgical techniques which are within the scope of a general practitioner. Introductory lectures on Hospital Dentistry are presented.

OSD 533. Sedation and Anxiety Control. (2-0-2 hours)
Prerequisites: Basic Sciences, Local Anesthesia, Fundamentals of Oral Surgery

This course is designed to present the basic concepts of sedation along with its rationale. The pertinent physiology and pharmacology information is presented. The techniques of inhalation and intravenous sedation are discussed and practiced in the laboratory.

OSD 541. Advanced Oral Surgery. (3-0-3 hours)
Prerequisite: Fundamentals of Oral Surgery

Advanced Oral Surgery consists of 32 hours of lectures covering the broad scope of oral surgical procedures including orthognathic surgery, pre-prosthetic surgery, treatment of infections, management of tumors and cysts, surgical treatment of diseases of the temporomandibular joint, treatment of facial trauma and principles of implantation and transplantation.

OSD 550C. Hospital Clerkship.
Prerequisites: Fundamentals of Oral Surgery, Advanced Oral Surgery, and Sedation I and II

Hospital Clerkship is a full-time, one week activity designed to give the dental student an introduction to hospital dentistry and orientation to the role of the dentist in the hospital. Students are assigned to dental services at University and Talmadge Hospitals where they take night call twice and treat oral surgery patients in the clinics and operating rooms. The student becomes familiar with methods of admission and discharge of patients, the hospital chart, initiating hospital orders and obtaining and providing consultations for other hospital services.

Two students at a time participate in the clerkship for one week. The week extends from 7:25 a.m. Monday to noon on Saturday. Two nights "on call" at University Hospital are included.

Orthodontics

Eugene H. Williamson, Chairman

ORTHO 534. Orthodontics. (3-0-3 hours)
Prerequisites: Anatomy 511, 512, 513, Occlusion 511, 512, 513, Physiology 513
512, 513, Physiology 513

Orthodontics 534 Part I is an introduction to malocclusion as one of the three primary diseases or disorders which affect the mouth and associated structures. This course is designed to provide the student with basic tools and skills by which he can observe, measure, evaluate, manipulate and communicate occlusal-facial relationships in a rational objectable fashion.

ORTHO 534. Orthodontics. (1-0-1 hour)
Prerequisite: ORTHO 534, Part I

Orthodontics 534 Part II is a seminar series comprised of a series of classic malocclusion, their etiology, diagnosis and treatment plan. Patient records will be presented which will illustrate the care and management of each type. The students will be required to abstract the records of a patient which has been treated in the Graduate Orthodontics Clinic. The abstract must include a critique of the results.

DH 318. Growth and Development. (1-0-1 hours)
Prerequisite: Oral Anatomy

This course will consider the physical and psychological growth and development of the individual from birth through adolescence. Strong emphasis will be placed on the growth and development of the dentition and face. Basic concepts of psychological development will be stressed in order to help the dental hygienist understand her young patients and design a preventive dental program suitable for their maturational level.

Pedodontics

D. Myers, Chairman; J. Barenie; K. Shoaf.

PEDO 522. Preclinical Pedodontics. (3-1-6 hours)
Didactic material and technique laboratory exercises necessary for Clinical Pedodontics.

Periodontics

B. Pennel, Chairman; J. Clark; J. Garnick; J. Keagle.

PER 511. Periodontics. (2-0-2 hours)
This course is concerned with the healthy periodontium and chronic inflammatory periodontal diseases. Local etiologic factors, patient education, oral hygiene, prevention and an introduction to instrumentation are also covered.

PER 512. Periodontics. (3-0-3 hours)
Prerequisite: PER 511

This course is concerned with instrumentation, gingival curettage and the acute periodontal diseases as well as the history, examination, diagnosis, and prognosis of patients with periodontal disease.

PER 513. Periodontics. (1-0-1 hours)
Prerequisite: PER 512

PER 513 completes the periodontal diseases with a discussion of dystrophic periodontal conditions and periodontal trauma from occlusion. The subject of periodontal surgery is initiated with general considerations and follows with a detailed coverage of the gingivectomy.

PER 520. Periodontics. (1-0-1 hours)
The flap operation is covered by lecture, PIP program and with a movie.

A laboratory session provides students with the opportunity to perform a gingivectomy and flap operation utilizing models. The remainder of the quarter is concerned with the osseous lesions in terms of diagnosis, management and wound healing.

PER 522/523. Periodontics. (2-0-2 hours)
Prerequisite: PER 513

This course covers perio-endo problems, and the various mucogingival surgical procedures with emphasis on the related wound healing studies. Osseous defects are corrected in a laboratory course. The role of systemic diseases in the etiology of periodontal disease, current

etiology and the relationship between periodontics and restorative dentistry are also covered.

PER 523C. Periodontics Clinic.
By the end of the sixth quarter, students must have completed the necessary procedures to establish periodontal health for a minimum of four patients.

PER 533C. Periodontics Clinic.
Prerequisite: PER 523C
By the end of the ninth quarter, students must have completed the necessary procedures to establish periodontal health for a minimum of eight patients. Students should participate in one surgical procedure.

PER 542. Periodontics. (2-0-2 hours)
Prerequisite: All other periodontics courses
This seminar course serves to review all previous material as well as providing an opportunity for discussing various aspects of patient management.

PER 543C. Periodontics Clinic.
Prerequisite: PER 533C
By the end of the twelfth quarter, students are to have established and maintained periodontal health of all patients under their care. They must have participated in a total of six surgical procedures.

PER 400. Dental Hygiene Clinic. (2-0-2 hours)
A thorough discussion of the normal and diseased periodontium including etiology, diagnosis, and rationale for various treatment procedures.

Prosthodontics

A. Rahn, Chairman; G. Fiebiger; B. Goldman; R. Hill; G. Parr; V. Urbanek.

OCC 522. Occlusion for Artificial Dentition. (1-1-2 hours)
Prerequisite: OCC 513
Lectures and laboratory sessions on the various concepts of occlusion for the artificial dentition, including physiology of occlusion, philosophy, and technique of arrangement of anatomic and non-anatomic denture teeth.

COM 520. Complete Dentures. (3-7-10 hours)
Prerequisite: OCC 522
Lecture, laboratory and clinical experiences on the various aspects of complete denture construction are presented.

RPD 523. Removable Partial Dentures. (9-3-6 hours)
Prerequisites: COM 520, OCC 522
Clinical-laboratory technique course designed to teach the fundamentals of good RPD design and fabrication. Considerable emphasis is placed on examination, sequential treatment planning, and mouth preparation inclusive of occlusal modifications to assure optimal stability and occlusal harmony during function.

PRO 533. Advanced Prosthodontics. (1-1-2 hours)
Prerequisites: OCC 522, RPD 523, COM 520
Lecture and laboratory course which is primarily concerned with immediate dentures, overdentures and advanced concepts of removable partial denture design.

Radiology

W. Wege, Coordinator

RADD 513. Radiology. (2-0-2 hours)
Prerequisite: College level Physics
This course covers the fundamentals of radiation production, radiation hazards and protection, dental radiographic technique, and interpretation.

RADD 128 and RADD 328. Dental Radiology. (2-3-3 hours)
This course is designed to acquaint the dental hygiene student with the fundamentals of radiology, intra-oral techniques for taking and processing of radiographs are taught. Clinical time is afforded for the application of these principles.

RADD 228 and RADD 428. Radiology Technique. (0-4-1 hours)
Using knowledge and skills learned in RADD 128 and RADD 328, students receive clinical experience in the dental radiology clinic of the School of Dentistry during their second year of training. This course continues for three quarters.

Restorative Dentistry

C. Morris, Chairman; Q. Davis; W. Edwards; T. Garman; I. Hawkins; D. Koth; R. Lorren; A. Nayyar; J. Sherrer; D. Smith; H. Williams.

OPD 511. Operative Dentistry. (2-3-5 hours)
The introductory course in operative procedures which teaches the principles and techniques of conservative cavity preparation and restoration of teeth with silver amalgam and esthetic restorative materials. The laboratory consists of treating simulated natural teeth and extracted human teeth.

OPD 512. Operative Dentistry. (2-2-4 hours)
Prerequisite: OPD 511
This course is a continuation of OPD 511 that includes the use of silver amalgam in more extensively involved teeth. The latter segment of the quarter introduces the student to supervised patient treatment applying operative principles and techniques thus far acquired.

OPD 513. Operative Dentistry. (1-2-3 hours)
Prerequisites: OPD 511, OPD 512, OPD 514, FIX 522, DPS 511, FIX 531
This course is an introduction to a variety of direct golds, the practical clinical application and the placement in a selection of preparations on simulated natural teeth.

RES 522C. Restorative Clinic. (0-2-2 hours)
Prerequisites: OPD 511, OPD 512, OPD 514, DAU 511, DPS 511
A variety of operative procedures are performed on patients in a closely supervised clinical environment.

RES 531C. Restorative Clinic. (0-4-4 hours)
Prerequisites: OPD 511, OPD 512, OPD 514, DAU 511, DPS 511, FIX 522, RES 522C

A variety of restorative procedures are performed on patients in a closely supervised clinical environment.

RES 532C. Restorative Clinic.
Prerequisites: OPD 511, OPD 512, OPD 514, DAU 511, DPS 511, FIX 522, FIX 531, RES 522C, RES 531C

A variety of restorative procedures are performed on patients in a closely supervised clinical environment.

OPD 514. Operative Dentistry. (3-5-8 hours)
Prerequisites: OPD 511, OPD 512, DPS 511

This basic course encompasses the principles and techniques encountered in preparation of teeth and subsequent fabrication of gold castings for single tooth restorations.

FIX 522. Fixed Partial Prosthodontics. (4-5-9 hours)
Prerequisites: OPD 511, OPD 512, OPD 514, DPS 511

This course consists of a lecture and laboratory section. The fundamentals of preparations, retainers and pontic design of fixed partial dentures are presented in the didactic portion. These principles are applied in the construction of two maxillary posterior gold fixed partial dentures. One maxillary anterior prosthesis is the framework for a porcelain fused to metal restoration.

FIX 531. Dental Ceramics. (1-2-3 hours)
Prerequisites: OPD 511, OPD 512, OPD 514, FIX 522, DPS 511

The fabrication and clinical application of the porcelain jacket crown, porcelain-fused-to-metal and porcelain inlay restorations are studied. Laboratory activity includes fabricating a porcelain-fused-to-metal crown, a porcelain inlay and use of ceramic pigments in characterization and shade control.

RES 533C. Restorative Clinic. (0-7-7 hours)
Prerequisites: OPD 511, OPD 512, OPD 514, DAU 511, DAU 512, DPS 511, FIX 522, FIX 531, RES 522C, RES 531C, RES 532C

A variety of restorative procedures are performed on patients in a closely supervised clinical environment.

RES 541C. Restorative Clinic. (0-5-5 hours)
Prerequisites: OPD 511, OPD 512, OPD 514, OPD 513, DAU 511, DAU 512, DPS 511, FIX 522, FIX 531, RES 522C, RES 532C, RES 533C

A variety of restorative procedures are performed on patients in a supervised comprehensive clinical environment.

RES 542C. Restorative Clinic. (0-5-5 hours)
Prerequisites: OPD 511, OPD 512, OPD 514, OPD 513, DAU 511, DAU 512, DPS 511, FIX 522, FIX 531, RES 522C, RES 531C, RES 532C, RES 533C, RES 541C

A variety of restorative procedures are performed on patients in a supervised comprehensive clinical environment.

RES 543C. Restorative Clinic. (0-4-4 hours)
Prerequisites: OPD 511, OPD 512, OPD 514, OPD 513, DAU 511, DAU 512, DPS 511, FIX 522, FIX 531, RES 522C, RES 531C, RES 532C, RES 533C, RES 541C, RES 542C

A variety of restorative procedures are performed on patients in a supervised comprehensive clinical environment.

Restorative Dentistry— Dental Practice Dynamics

G. Heuer; R. Kaltenbach; N. Minden; A. Smith.

DAU 511. Dental Auxiliary Utilization. (1 hour)
Lecture and practice in the following:
1. Care and maintenance of dental equipment
2. Operation of dental equipment
3. Chair, patient, and operator positions
4. Instrument sterilization rationale and procedures
5. Basic interpersonal skills including telephone techniques

DAU 512. Dental Auxiliary Utilization. (1 hour)
Prerequisite: DAU 511

Lectures in methods of efficient, stress-free, four-handed, sit-down operating techniques with emphasis on efficiency of motion and auxiliary management.

DAU 532. Dental Auxiliary Utilization. (4 hours)
Prerequisites: DAU 511 and DAU 512

In the clinical setting the students practice the proper utilization and management of a trained dental assistant, while performing clinical dentistry for patients.

PD 532. Dental Practice Dynamics. (3 hours)
Prerequisites: DAU 511, DAU 512, DAU 543

This course is concerned with the basics of dental practice dynamics. All aspects of management are covered in brief with emphasis on interpersonal skills.

PD 543. Dental Practice Dynamics. (6 hours)
Prerequisites: DAU 511, DAU 512, DAU 543, PD 532

Management concepts are presented in more depth in small group seminars, followed by the student functioning in various management roles within a simulated private practice. This allows the student to develop his/her management skills by the management of his/her own dental team.

DH 145 and DH 345. Interpersonal Communications and Behavior Modification. (3-0-3 hours)

Practical training in a helping model of communication and behavior modification in techniques as applied to the dental setting. The human relations communication models emphasizes good listening behavior, accurate perception of feelings and responding to patients with empathy, respect, and warmth. Specific problems typically encountered in dentistry are approached using the principles of behavior modification. This course requires high student involvement during class time since role play, problem identification, and problem-solving procedures are used.

graduate studies

Dean—Dr. Sam A. Singal

School of Graduate Studies

The School of Graduate Studies is an administrative unit dealing with graduate study. The graduate program is administered by the dean of the School of Graduate Studies. The office of the School of Graduate Studies is located in Room 2-K1, Sanders Research and Education Building. Correspondence or inquiries should be sent to: School of Graduate Studies, Medical College of Georgia, Augusta, Georgia 30901.

Council

The Graduate Council is composed of faculty members appointed by the dean to represent each of the fields participating in the graduate program. The council advises the dean in formulating policies and regulations which govern graduate work.

Faculty

The members of the graduate faculty are indicated by an asterisk preceding their names in the General Faculty list in the back of this *Catalog*.

Graduate Student Association

This organization has been formed to represent the will of the graduate students within the framework of the school and the Medical College of Georgia. All graduate students are urged to participate.

Objectives

The primary goals of the School of Graduate Studies are to help provide excellence in education on the graduate level in human biology for those interested in careers in health science professions; to supply leadership in basic research in areas of human biology so as to provide a firm foundation for the conquest of disease; and to provide academicians to man health science professional schools.

It offers superior students an opportunity to realize the full extent of their capabilities and to gain the intimate acquaintanceship with the fundamental concepts of their field that will enable them to achieve the highest degree of competence in their chosen discipline.

Degrees

The college is authorized by the Board of Regents of the University System of Georgia to grant advanced degrees through its School of Graduate Studies.

Since graduate study is a full-time endeavor and is expensive in terms of faculty and other crucial resources, primary consideration will be given to those applicants having as their career objectives the completion of a course of study leading to the Doctor of Philosophy degree or a professional master's degree at the college.

Doctor of Philosophy

This advanced degree is not conferred solely as a result of a prescribed period of study nor will it be conferred upon the completion of any definite amount of work described in advance. Rather, it will be conferred in recognition of proficiency in research, breadth and soundness of scholarship, and thorough acquaintenance with a specific field of knowledge as determined by the faculty. Evidence of such attainment must be provided through the passing of such written and oral examinations as may be required and through the presentation of an acceptable dissertation based upon independent research. This degree will be conferred on candidates who have met the requirements in the fields of Anatomy, Biochemistry, Endocrinology, Microbiology, Pharmacology or Physiology.

Doctor of Philosophy-Doctor of Medicine

This program offers the unusual candidates an opportunity to obtain both degrees with research work being performed in the basic sciences. The requirements are similar to those described above. This program is only available to accepted medical students.

Master of Science

This advanced general degree is a research degree and will be conferred on candidates who have met requirements in the fields of Anatomy, Biochemistry, Endocrinology, Microbiology, Pharmacology, and Physiology.

Master of Science-Doctor of Medicine

This program offers the unusual candidate an opportunity to obtain both degrees with research work being performed in the basic sciences. The program is only available to accepted medical students.

Master of Science in Oral Biology

This advanced degree is a research degree and will be conferred on candidates who have met the requirements in the field of Oral Biology.

Master of Science in Medical Illustration

This advanced professional degree will be conferred on candidates who have met requirements in the field of Medical Illustration.

Master of Health Education

This advanced professional degree is an educational degree and will be conferred on candidates who have met requirements in the field of Allied Health Sciences in the areas of Dental Hygiene, Occupational Therapy and Medical Technology.

Application Procedures

Send or direct all application materials (application form, application supplement, reference reports, health questionnaire, transcripts and GRE scores) and requests for financial aid to the dean, School of Graduate Studies. A complete application consists of the following four items:

1. Application

A complete application form, an application supplement and reference reports are required for those seeking admission to the School of Graduate Studies. Application materials can be obtained by writing the dean, School of Graduate Studies, Medical College of Georgia, Augusta, Georgia 30901.

2. Transcripts

Official transcripts of all previous and current college, graduate or professional studies must be received before applications are considered. Transcripts must be received directly from schools attended.

3. Physical Examination

A self-evaluation health questionnaire is included with the application materials. Upon acceptance to the School of Graduate Studies a student will be sent a Student Health Record form, which is to be completed and mailed by the examining physician directly to this office.

4. Graduate Record Examination (GRE) Scores

The Aptitude Test and Advanced Test (either chemistry or biology) scores are required of all applicants, except those to the master's program in Medical Illustration and Health Education, who are required to take only the Aptitude Test. Applicants should take the GRE as early as possible in their senior undergraduate year, preferably at one of the Fall administrations. The Medical College Admissions Test (MCAT) or the Dental Admissions Test (DAT) may be substituted for the GRE in some programs. (See individual program admission requirements.) The GRE scores (or MCAT or DAT) should be forwarded to the dean, School of Graduate Studies. The GRE score reporting code for the School of Graduate Studies is R5406-4.

Final selection of students for admission is subject to the discretion of the dean of the School of Graduate Studies. Letters of acceptance will be sent by the dean.

Admission of Foreign Students

Graduates of foreign colleges and universities who meet the standards of admission described above may be considered for admission. Those interested should identify the country of citizenship and the desired field of study in an initial communication. In addition to the other entrance materials, the applicant must submit the results of the Test of English as a Foreign Language. Arrangements for this examination can be made by requesting information concerning examination and locations of examinations from the Educational Testing Service, Princeton, New Jersey 08540. Foreign applicants must start the process of securing admission at least six months before the beginning of the desired time of acceptance.

Registration

The academic program of the student is planned in consultation with the student's major advisor or with the student's major department chairman before selection of a major advisor. All students begin registration at the School of Graduate Studies office before completion of registration at the registration center. Changes in registration are recognized and valid only if they have been made with the consent of the major advisor, the dean, and the registrar.

An applicant's registration and class attendance constitute an agreement on the part of the applicant to comply with the rules and regulations of the college as published in this *Catalog* and other official publications of the college during the student's continued enrollment.

A student's continued enrollment in the School

of Graduate Studies is subject to the decision by the dean and other designated officers that academic grades and progress are satisfactory, that rules of the college are being complied with, and that the best interest of the school and of other students is being served.

Auditors may take graduate courses, but no academic credit is allowed. Auditors pay usual tuition and laboratory fees.

Fees and Expenses

Please see General Information section on Fees and Expenses for additional information on deposits, housing, insurance, fees and other costs.

Fees for graduate students enrolled for 12 quarter hours or more:

Matriculation Fee—$185 per quarter.

Non-Resident Fee (in addition to Matriculation Fee)—$317 per quarter. See General Information on State Residency Policy.

Fees for graduate students enrolled for less than 12 quarter hours:

Matriculation Fee—$15 per quarter hour.

Non-Resident Fee (in addition to Matriculation Fee) for students enrolled less than 12 quarter hours—$26 per quarter hour.

Scholastic Regulations

Classification of Graduate Students

Students may be admitted to the School of Graduate Studies under either of the following classifications:

1. Regular Graduate Student. A student who is admitted to the School of Graduate Studies, and who wishes to earn an advanced degree. Such a student, however, is not specifically considered either a doctoral or master's student until he or she has met the requirements for candidacy for a particular degree. (See degree requirements below.)
2. Special Graduate Student. A student who is admitted to the School of Graduate Studies and who does not wish to earn an advanced degree, or who is admitted conditionally, and may later be re-classified as a regular graduate student upon satisfaction of such conditions as may be specified. Transfer from this category to "regular graduate student" status is not automatic.

Grades

All credit is expressed in quarter hours. An academic year is composed of three quarters. A student must maintain an average of "B" or better (or "S" on 900 courses) in his chosen discipline. Only those courses for which a grade of "C" or better is received may be credited toward satisfaction of any degree requirement. Students who receive the grade "Incomplete" will have one quarter in which to complete the work for the course and remove this grade or it will be changed to "F" automatically at the end of the first quarter following receipt of the "I." Students needing more than one quarter to remove the "Incomplete" must have written permission of the instructor with the concurrence of the dean to present to the registrar. Continuation of study in good standing in the School of Graduate Studies is contingent on the maintenance of a minimum cumulative weighted quality point average of 2.8 in the 600, 700 and 800 courses. A student whose quality point average falls short of 2.8 will be automatically placed on academic probation in which case the student must maintain a weighted quality point average greater than 3.0 on 600, 700 and 800 courses for two consecutive quarters, in order to remove the probation. A graduate student will not be eligible for graduation unless his official college transcript shows that he has an overall weighted quality point average of 2.8 on all the 600, 700 and 800 (graduate) courses that he has taken at this institution.

When a course is repeated, both the original and the second grade and hours for repeated courses taken at MCG will be used in computing the grade point average, but only the hours for the last of these courses will be counted toward meeting the total hours earned for graduation. The Graduate School discourages the retaking of courses to improve grades. Courses may be retaken only after approval of a petition to the dean. Permission of the course instructor and department chairman is required before submission of the petition.

Grading System for the School of Graduate Studies

Grade	Description	Quality Points
For 600, 700 and 800 courses		
A	Excellent	4.0
B	Good	3.0
C	Satisfactory	2.0
D	Passing	1.0

Grade	Description	Quality Points
F	Failure	0.0
WF	Withdrew, failing	0.0
I	Incomplete	Not computed
W	Withdrew	Not computed
For 900 courses		
I	Incomplete	Not computed
W	Withdrew	Not computed
S	Credit for participation in seminar (901-2-3) or credit for conduct of research (921 or 930)	Not computed
U	Performance in seminars or research of such quality that no credit is given	Not computed

See Academic Regulations in General Information for full description of I, W, S and U.

Course Numbering System

Courses in the School of Graduate Studies are numbered from 600-999. Only those courses preceded by an asterisk are approved for credit by the School of Graduate Studies. Courses are open to all students at the discretion of the department involved. Prior approval must be obtained through the Graduate School Office by students desiring to take graduate courses but who are not enrolled in the School of Graduate Studies.

Acceptance of Graduate Credit by Transfer

Transfer of graduate credit is never automatic; any credits transferred do not reduce the residence requirement for any advanced degree.

In the case of a prospective Ph.D. candidate entering the School of Graduate Studies with a master's degree from another institution, the candidate shall pass an examination on his major subject and thesis during the first quarter of residence if credit for any pertinent portion of the master's course work (30 quarter hours maximum usually allowed) is to be applied to the Ph.D. The transfer of any course work beyond the master's level is a matter for negotiation between the student, his advisory committee, his major department and the dean. In general, no more than 60 quarter hours may be transferred toward the Ph.D., under any circumstances.

At the discretion of the dean and the faculty of the major department, up to ten quarter hours credit toward a master's degree may be transferred.

M.S.-M.D. degree: A maximum of 15 quarter hours may be transferred as a result of satisfactory completion of the first (or second) year of the medical curriculum, as recommended by the candidate's advisory committee to the dean.

In all cases any graduate course work to be transferred must have the final approval of the dean.

Major Advisor

Upon admission to a degree program a major advisor is selected who will serve as chairman of the Student's Advisory Committee. It is necessary that the student confer with the department chairman or his major advisor prior to his first enrollment in graduate work. The chairman or advisor must approve, prior to the student's enrollment, any course to be counted toward a degree.

Advisory Committee

An advisory committee will have the student's major advisor as chairman. At the proper time the chairman of the committee, after consultation with the student, will suggest to the department chairman the names of additional members of the faculty to serve as members of the Student's Advisory Committee. One or two members of the committee will be from outside the student's major department. The department chairman will recommend the committee to the dean and upon his concurrence, the committee will then be formally appointed.

This committee will guide the student in planning his program of study and/or research. The student submits his program of study (course work outline) to his advisory committee which will review it and indicate if any modifications are necessary. This committee also will review, suggest revisions, and approve the student's plan of research (research proposal form.) Certain master programs are not research-oriented, but may require a graphic or special project. See individual program requirements.

Residence and Time Limit

The minimum requirement for the Doctor of Philosophy degree is three full academic years beyond the bachelor's degree which cannot be satisfied through summer work alone. At least three full consecutive quarters immediately prior to completion of degree requirements must be spent in residence on the campus. If the student

has part-time duties (employment or a teaching assistantship), the residence requirements will be increased accordingly to provide the equivalent of three quarters of full-time study in residence. All course work and other requirements for the Doctor of Philosophy degree, except the Final Oral Examination, must be completed within six consecutive calendar years.

The minimum residence requirement for all masters' degrees is one full academic year. All work credited toward a master's degree must be completed within five consecutive calendar years.

Financial Aid

Fellowships, Traineeships, Assistantships

The fellowships and assistantships offered by the School of Graduate Studies are listed below. Further information is available from the School of Graduate Studies' office. Students should also write for the Student Financial Aids Bulletin. (See General Information.)

Medical College of Georgia Graduate Teaching Assistantships

Graduate teaching assistantships carry stipends of $4200 per calendar year and are awarded to outstanding students. Holders of these fellowships are required to enroll for not less than 20 hours per quarter. A minimum of one-third time in service is required. See section on General Information regarding waiver of out of state fees.

The Doctor of Philosophy Degree Program

Requirements for Admission:

1. A bachelor's degree or equivalent from an accredited college or university.
2. Adequate preparation in the field of proposed graduate study, as determined by the faculty in that field. Departmental recommendations:

   Anatomy

   Recommended preparation: An undergraduate major in zoology or general biology, or a major in chemistry of physics with a minor in zoology or general biology (at least three basic courses.)

   Cell and Molecular Biology

   Biochemistry

   Recommended preparation: Courses at the college level in physics, mathematics through integral calculus, biology, organic chemistry through qualitative organic and a year of physical chemistry.

   Microbiology

   Recommended preparation: Adequate background in biology and chemistry, usually an undergraduate major in biology and a minor in chemistry, or a major in chemistry with a minor in biology.

   Endocrinology

   Recommended preparation: Course work in inorganic, organic and physical chemistry, qualitative and quantitave analysis, and in biological sciences including such courses as physiology, anatomy, histology, embryology, zoology, etc.

   Pharmacology

   Recommended preparation: Major training in at least one of the following fields: zoology, anatomy, microbiology, physiology, biochemistry, botany, mathematics or electronics. Courses in several of the fields other than the major field are desirable.

   Physiology

   Recommended preparation: Chemistry, through organic and quantitative analysis; an introductory course in zoology; one course each in comparative anatomy and embryology; a full year in physics and mathematics through differential and integral calculus. The Graduate Record Examination is required of all Physiology applicants.
3. Satisfactory scores on the Aptitude Test and the Advanced Test of the Graduate Record Examination. (The Medical College Admissions Test (MCAT), or its Dental School Equivalent may substitute for the GRE.)
4. A satisfactory physical examination.

Requirements for Graduation:

1. Graduate Study

   A minimum of three academic years of full-time graduate study beyond the bachelor's degree is required.
2. Residence

   A minimum of three consecutive quarters of full-time study or the equivalent in residence on this campus is required.
3. Program of Study and Research Proposal

   A program of study and research plan proposed as the basis for a dissertation which has been approved by the Student's Advisory Committee and the dean is required.
4. Research Tools

   The student must demonstrate a knowledge of two appropriate tools of research. He may

offer two modern languages; French, German and Russian are recommended. Another language or a research technique chosen from computer programming language or mathematical methods may be substituted if it has greater relevance to the candidate's program of study and is recommended by his advisory committee. The native language may not be used to fulfill a language requirement; foreign students may be permitted to substitute English to satisfy one foreign language requirement.

5. The Ph.D. General Examination
The Ph.D. general examination is divided into two parts: (1) a First Examination, and (2) a Second Examination. These examinations will be as follows:

First Examination

The First Examination is a comprehensive test over the core content of the discipline under study. It is designed to test the student's knowledge and ability to correlate the basic material presented during the first part of his graduate studies. This examination may also serve as the Final Comprehensive Examination for the master of science degree if the department so decides.

The First Examination may be taken after a minimum of 30 quarter hours of graduate study provided at least 10 of these hours are at the "800 level." It must be successfully passed before the student will be permitted to register for more than a total of 8 quarters of graduate study or become a candidate for a graduate degree. In the event of failure, the First Examination may be repeated once with the permission of the department chairman provided at least one additional quarter of graduate work has been completed. The student must have submitted an approved program (course work outline) for the Ph.D. before becoming eligible to take the First Examination. The First Examination will be a written test that occupies two half days or one full day. The examination will be prepared by the Student's Advisory Committee, submitted to the Graduate School for approval at least one week in advance, and graded by the Student's Advisory Committee under the supervision of the department chairman. The results will be certified to the Graduate School by the chairman of the department involved and the student's written answers will be filed with the department.

Second Examination

This examination will test the student's understanding of his specialized field of study, his ability to apply basic information and his understanding of the literature. The committee administering the examination will define the student's field of study. At least one academic quarter must elapse after the successful completion of the First Examination and the Second Examination. It is the responsibility of the student and his advisor to petition the dean of the School of Graduate Studies to schedule this examination. The examination is written and usually occupies two half days or one full day. A two-hour oral examination may be substituted for one-third of the written examination. The Second Examination will be prepared, with one outside examiner appointed by the dean of the School in attendance, submitted to the Graduate School for approval, and graded by the Student's Advisory Committee under the supervision of the department chairman. The outside examiner does not participate in the examination preparation but sees that all procedures of the examination are being conducted within the guidelines of the School of Graduate Studies.

On both examinations, it is the responsibility of the committee to recommend whether or not the student has passed the examination: a majority of the committee is needed for the student to pass. In the event of failure, this examination can be retaken once if this is recommended by the examining committee and the chairman of the department and approved by the dean of the School of Graduate Studies. At least two quarters of additional study are required before the examination may be retaken.

6. Admission to Candidacy for the Doctor of Philosophy Degree
A student will be admitted to candidacy for this degree by the dean of the School of Graduate Studies when he has met requirements 3, 4 and 5 for this degree. A student may take various courses after admission to the School of Graduate Studies, but there is no commitment that these courses will be credited toward a degree until he is admitted to candidacy for an advanced degree. A student must be eligible for candidacy for the Ph.D. at least three quarters before the proposed graduation date.

7. Application for Graduation
   Each candidate for a graduate degree must apply for graduation at the School of Graduate Studies' office.
8. Dissertation
   A dissertation based on original investigation which gives evidence of independent thinking, scholarly ability and critical judgment, and indicates familiarity with research methods and techniques is required. Directions for preparation of the dissertation are available in the School of Graduate Studies' office. At least eight weeks before the proposed date of graduation, the dissertation, proof-read and corrected (in pencil) by the student and his major advisor, is distributed by the student to members of the Student's Advisory Committee. The committee's role is no to correct grammar, rhetoric or indicate typing mistakes, but to evaluate content and concepts. At least five weeks before the proposed date of graduation, one corrected copy of the dissertation and the Dissertation Approval Form (GS-6) signed by the chairman should be forwarded to the dean. The signed form indicates that the members of the committee have read the reader's copy of the dissertation and find it acceptable for the purpose of examining the student. The student will be held responsible, under the supervision of the chairman, for making all changes recommended by the committee.
9. Final Oral Examination
   Satisfactory performance on the Final Oral Examination in which the student defends his dissertation before his Advisory Committee and three readers is required. This examination is based primarily on the dissertation and the field of knowledge that constitutes the student's major subject.

   It is the responsibility of the student and his major advisor to meet with the departmental chairman to select three readers, who are to be approved by the dean. These readers are external examiners, who participate and vote along with the members of the Student's Advisory Committee in the Final Oral Examination. Corrected copies of the dissertation are to be distributed to the readers after approval by the advisory committee.

   The dean or his representative will attend all final oral examinations for the Ph.D. degree, and will require a corrected copy of the dissertation two weeks in advance of the Final Oral Examination. Notification in writing will be sent to the dean from the department chairman stating that the student is ready for the Final Oral Examination, a time and place have been established by the department, and all advisory committee members, readers, and dean have been notified. This examination is open to the public and all members of the faculty and student body are invited to attend.

   After a successful Final Oral Examination, three final copies of the dissertation must be deposited with the School of Graduate Studies at least one week prior to graduation. Each copy must bear the approval signature of the major advisor (chairman of the Advisory Committee), chairman of the department and the dean.
10. Satisfactory Fulfillment
    Satisfactory fulfillment of any additional requirement of the student's major department, or the institution is required.

    Additional requirements: Upon satisfactory completion of the Final Oral Examination, students must come by the School of Graduate Studies' office and complete a Survey of Earned Doctorates form. This is required by the National Research Council of all students graduating with a doctoral degree.

The Master of Science Degree Program

Requirements for Admission:

These are identical with those for the Ph.D. degree program.

Requirements for Graduation:

1. Graduate Study
   Forty-five quarter hours of graduate study beyond the bachelor's degree is required. A minimum of 30 quarter hours must be allocated to graduate course work in or related to the major field, at least ten of these hours to be in "800 level" courses.
2. Residence
   A minimum of three consecutive quarters of full-time study or the equivalent in residence on this campus is required.
3. Program of Study and Research Proposal
   A program of study and a research plan proposed as a basis of a thesis, which has been approved by the advisory committee and the dean is required.
4. Research Tools
   Reading knowledge of one foreign language is required. French, German, and Russian are recommended. Another language or a research

technique chosen from computer programming language or mathematical methods may be substituted if it has greater relevance to the candidate's program of study and is recommended by his advisory committee. The native language of the candidate may not be used to fulfill a language requirement; foreign students may be permitted to substitute English to satisfy the foreign language requirement.

5. Admission to Candidacy for the Master of Science Degree
   A student will be admitted to candidacy for this degree by the dean of the School of Graduate Studies when he has met requirements 3 and 4 for this degree. A student may take various courses after admission to the School of Graduate Studies, but there is no commitment that these courses will be credited toward a degree until he is admitted to candidacy for an advanced degree. A student must be eligible for candidacy for the M.S. at least one quarter before the proposed graduation date.
6. Comprehensive Examination (Departmental Option)
   The Comprehensive Examination may be taken after a minimum of 30 quarter hours of graduate study provided at least ten of these hours are at the "800 level." It must be successfully passed before the student will be permitted to register for more than a total of eight quarters of graduate study or become a candidate for a graduate degree. In the event of failure, this examination may be repeated once with the permission of the department chairman provided at least one additional quarter of graduate work has been completed. The student must have submitted an approved program of study (course work outline) for the M.S. before being eligible to take the Comprehensive Examination. The Comprehensive Examination will be a written test that occupies two half days or one full day. The examination will be prepared by the Student's Advisory Committee, submitted to the Graduate School for approval, and graded by the Student's Advisory Committee under the supervision of the chairman of the department. The results will be certified to the Graduate School by the chairman of the department involved and the student's written answers will be filed with the department.
7. Application for Graduation
   Each candidate for a graduate degree must apply for graduation at the School of Graduate Studies' office.
8. Thesis
   A thesis based on original investigation is required. Directions for preparation of the thesis are available in the School of Graduate Studies' office. The scheduling of the preparation of the thesis and its review by the advisory committee is identical with that for the Ph.D. dissertation (see appropriate section).
9. Final Oral Examination
   Satisfactory performance on the Final Oral Examination in which the student defends his thesis before his advisory committee is required. This examination is based primarily on the thesis and the field of knowledge that constitutes the student's major subject. The scheduling and conducting of this examination is identical with that for the Ph.D. dissertation, except that the three readers (external examiners) are not required for this Final Oral Examination. After a successful Final Oral Examination, three final copies of the thesis must be deposited with the School of Graduate Studies at least one week prior to graduation. Each copy must bear the approval signature of the major advisor (Chairman of the Advisory Committee), chairman of the department and the dean.
10. Satisfactory Fulfillment
    Satisfactory fulfillment of any additional requirements of the student's major department or the institution is required.

Combined Doctor of Philosophy-Doctor of Medicine and Master of Science-Doctor of Medicine Degrees Programs

Requirements for Admission:

Applicant must be enrolled in the School of Medicine and should be in the process of completing, in good standing, his first or second year of the medical curriculum. He will require two letters of recommendation from the faculty of the School of Medicine.

The requirements for the combined degree programs are not substantially different from those of the individual degree programs.

Requirements for Graduation:

Doctor of Philosophy-Doctor of Medicine Degree Program.

1. Graduate Study and Residence
   It is anticipated that the Ph.D.-M.D. program will require 6 years.

2. Program of Study and Research Proposal
   Within the first three months after enrollment as a Ph.D.-M.D. candidate, an advisory committee will be established with the student's major professor as its chairman. The advisory committee will consist of four individuals in addition to the major professor, with a representative from at least one other department. The committee will plan and direct the student's program of study and research. A program of study and research plan proposed as the basis for a dissertation which has been approved by the Student's Advisory Committee and the dean is required.
3. Research Tools
   See Requirements for Graduation, Doctor of Philosophy degree.
4. The Ph.D. General Examination
   See Requirements for Graduation, Doctor of Philosophy degree.
5. Admission to Candidacy for the Doctor of Philosophy degree
   A student will be admitted to candidacy for this degree by the dean of the School of Graduate Studies when he has met requirements 2, 3 and 4 for this degree. A student may take various courses after admission to the School of Graduate Studies, but there is no commitment that these courses will be credited toward a degree until he is admitted to candidacy for an advanced degree.
6. Application for Graduation
   Each candidate for a graduate degree must apply for graduation.
7. Dissertation
   See Requirements for Graduation, Doctor of Philosophy degree.
8. Final Oral Examination
   See Requirements for Graduation, Doctor of Philosophy degree.
9. Satisfactory Fulfillment
   Satisfactory fulfillment of any additional requirements of the student's major department, or the institution is required.

Requirements for Graduation:
Master of Science-
Doctor of Medicine Degree Program.

1. Graduate Study
   Forty-five quarter hours of graduate study are required of which a maximum of 15 quarter hours may be transferred as a result of satisfactory completion of the 1st (or 2nd) year of the medical curriculum. A minimum of 15 quarter hours must be allocated to advanced course work (800 series) in or related to the major field. Fifteen additional quarter hours may be allocated to seminar (901, 902 and 903), problem (921) and research (930). Course work programs will be arranged on an individual basis.
2. Residence
   One full academic year in residence as a graduate student is required. It is anticipated that the minimum time for the combined M.S.-M.D. degree would be 4½ years.
3. Program of Study and Research Proposal
   Within the first three months of the student's enrollment as a M.S.-M.D. candidate, an advisory committee will be established with his major professor as its chairman. The advisory committee should consist of approximately four individuals in addition to the major professor with at least one representative from another department. This committee will plan the student's course of study. A program of study and a research plan, which will serve as the basis for a thesis, should be recommended by the candidate's advisory committee and approved by the dean.
4. Research Tools
   See Requirements for Graduation, Master of Science degree.
5. Admission to candidacy for the Master of Science Degree
   See Requirements for Graduation, Master of Science degree.
6. Comprehensive Examination (Departmental Option)
   See Requirements for Graduation, Master of Science degree.
7. Application for Graduation
   Each candidate for a graduate degree must apply for graduation.
8. Thesis
   See Requirements for Graduation, Master of Science degree.
9. Final Oral Examination
   See Requirements for Graduation, Master of Science degree.
10. Satisfactory Fulfillment
    Satisfactory fulfillment of any additional requirements of the student's major department or the institution is required.

Master of Science in Oral Biology Degree Program

Requirements for Admission:

1. A D.M.D. or D.D.S. degree, or its equivalent, from a recognized School of Dentistry.

2. Adequate preparation in the field of proposed graduate study as determined by the faculty of the Oral Biology Department.
3. Satisfactory scores on the Aptitude Test and the advanced portion of the Graduate Record Examination or the Dental Admission Test (DAT).
4. A satisfactory physical examination.

Requirements for Graduation:

1. Graduate Study
   Forty-five quarter hours of graduate study is required. A minimum of 15 quarter hours must be allocated to advanced course work (800 series) in or related to the major field, including 12 hours of core curriculum consisting of OBIO 811, 822, 833, 841, 852, 863 or acceptable equivalents. No course of the 600-700 series or an equivalent course, nor any course that the student used to satisfy any requirement for a professional degree or an equivalent course may be used to satisfy this requirement. Thirty quarter hours of the required 45 are to be allocated to seminars (901, 902 and 903), investigation of a problem (921) and research (930) for the thesis.

   Each graduate student is required to present a total of four seminars (2 seminars/year). All Oral Biology graduate students in residence, registered part or full-time are required to attend all Oral Biology Graduate Seminars until the time of their graduation.
2. Residence
   Two full academic years in residence are required.
3. Program of Study and Research Proposal
   A program of study and a research plan proposed as the basis for a thesis, which have been approved by the advisory committee and the dean, is required.
4. Research Tools
   Reading knowledge of one foreign language is required. French, German, and Russian are recommended. Another language or a research technique chosen from a computer programming language or mathematical method, e.g., HS 850, 851, 852 may be substituted if it has greater relevance to the candidate's program of study and is recommended by his advisory committee. The native language of the candidate may not be used to fulfill a language requirement. Foreign students may be permitted to substitute English to satisfy the foreign language requirement.
5. Admission to candidacy for the Master of Science Degree
   A student will be admitted to candidacy for this degree by the dean of the School of Graduate Studies when he/she has met requirements 3 and 4 for this degree. A student may take various courses after admission to the School of Graduate Studies, but there is no commitment that these courses will be credited toward a degree until he/she is admitted to candidacy for an advanced degree. A student must be eligible for candidacy for the M.S. at least one quarter before the proposed graduation date.
6. Comprehensive Examination (Departmental Option)
   This examination is a comprehensive test over the core content of the discipline under study. It is designed to test the student's knowledge and ability to correlate the basic material presented during the first part of his graduate studies.

   This examination may be taken after a minimum of 30 quarter hours of graduate study provided at least ten of these hours are in courses at the "800 level." It must be successfully passed before the student will be permitted to register for more than a total of eight quarters of graduate study or become a candidate for a graduate degree. In the event of failure, this examination may be repeated once with the permission of the department chairman provided at least one additional quarter of graduate work has been completed. The student must have submitted an approved program of study (course work outline) for the M.S. degree before he is eligible to take this examination.

   This examination will be a written test that occupies two half days or one full day. The examination will be prepared by the Student's Advisory Committee, submitted to the Graduate School for approval, and graded by the Student's Advisory Committee under the supervision of the department chairman. The results will be certified to the Graduate School by the chairman of the department involved and the student's written answers will be filed with the department.
7. Application for Graduation
   Each candidate for a graduate degree must apply for graduation at the School of Graduate Studies' Office.

8. Thesis
   See Requirements for Graduation, Master of Science degree.
9. Final Oral Examination
   See Requirements for Graduation, Master of Science degree.
10. Satisfactory Fulfillment
    Satisfactory fulfillment of any additional requirements of the student's major department, or the institution is required.

The Master of Science in Medical Illustration Degree Program

Requirements for Admission:

1. A bachelor's degree from an accredited college or university with a cummulative grade point average of 2.8.
2. Required preparation as follows:
   Biology/Zoology—These four courses must be passed with a 3.0 cummulative grade point average.
   a) Comparative Vertebrate Anatomy or Vertebrate Morphology, with lab including student dissection of a mammal
   b) Histology
   c) Embryology (b or c should include laboratory use of microscope)
   d) Human Physiology (a course in General Physiology or Vertebrate Physiology would be acceptable)

   Art
   a) Life Drawing from the model (at least one course; additional courses are recommended)
   b) Although no other specific courses are required, a student is expected to have a strong background in studio art.
3. Superior ability in drawing and rendering realistically from observation, as demonstrated through submission of a portfolio of original artwork.
4. A personal interview, after being evaluated by the faculty as satisfactorily fulfilling the above requirements.
5. A satisfactory physical examination.
6. Satisfactory score on the Aptitude Test portion of the Graduate Record Examination.

Requirements for Graduation:

1. Graduate Study
   A designated program of study must be followed.

   First Year
   ANM 550, 551 Medical Gross Anatomy
   ANM 553 Medical Histology
   ANM 331 Basic Neuroanatomy
   MIL 650, 651, 652 Medical Illustration Techniques I
   MIL 659 Publication Art Techniques
   MIL 665 Medical Photography
   MIL 678 Surgical Techniques
   MIL 775 Presentation of Visual Information

   Second Year
   MIL 750, 751, 752 Surgical Observation/Drawing
   MIL 753 Printing & Publishing
   MIL 758 Advanced Medical Photography
   MIL 761, 762, 763 Medical Illustration Techniques II
   MIL 764 Survey of Learning Resources
   MIL 811 Pathology

   Third Year
   MIL 658 Tri-dimensional Techniques
   MIL 780 Television
   MIL 801 Medical Illustration—Independent Study
   MIL 802 Departmental Development & Administration
   MIL 804 Scientific Exhibit Design
   MIL 928 Medical Illustration—Graphic Project
   Note: Although not required, a student is strongly advised to work as a salaried intern in a medical illustration department during at least one of the two summer vacations.
2. Residence
   The required minimum for residence on this campus is eight quarters of full-time graduate study or the equivalent.
3. Examination
   By the end of the second year of study a student will be required to pass a qualifying examination administered by the faculty of the Medical Illustration program. The dean will be notified when and to whom these examinations are to be given, and will be informed of the results regarding the status of each student taking the examination.
4. Program of Study and Graphic Project Proposal
   A program of study and an outline of the work proposed for a graphic project must be approved by the Student's Advisory Committee and the dean.
5. Admission to candidacy for the Master of Science Degree in Medical Illustration
   A student will be admitted to candidacy for this degree by the dean of the School of Graduate Studies when he has met requirements 3 and 4 for this degree. A student may take various courses after admission to the School of Graduate Studies, but there is no

commitment that these courses will be credited toward a degree until he is admitted to candidacy for an advanced degree. A student must be eligible for candidacy for the M.S.M.I. at least one quarter before the proposed graduation date.

6. Application for Graduation
   Each candidate for a graduate degree must apply for graduation at the School of Graduate Studies' office and pay the appropriate diploma fee to the registrar.
7. Graphic Project
   At least four weeks before the proposed date of graduation, a copy of the completed graphic project must be submitted to the chairman of the Student's Advisory Committee. Each member of the committee then will have the opportunity to examine the graphic project and to question the student informally concerning any portion of it with regard to knowledge and presentation of subject matter, quality of illustration techniques, choice of communication medium, content of supplementary text, etc. Any changes that the committee member considers necessary should be discussed at this time, and a list of corrections requested should be sent to the chairman of the advisory committee. At least two weeks before the proposed date of graduation, the Approval Form, signed by the chairman and each member of the advisory committee will be forwarded to the dean. The student will be held responsible, under the supervision of the chairman of his advisory committee, for making the changes recommended by the committee. At least one week prior to graduation, three copies of the graphic project in final form must be deposited with the School of Graduate Studies. Each copy must bear the approval signature of the major advisor (chairman of the advisory committee) and the dean.
8. Final Oral Examination
   No formal oral examination in defense of the graphic project is required. This requirement should be satisfied as stated in 7 above.
9. Satisfactory Fulfillment
   Satisfactory fulfillment of any additional requirements of the student's major department or the institution is required.

The Master of Health Education Degree Program

This advanced professional degree is an educational degree oriented toward teaching and clinical skills in the Allied Health fields of Dental Hygiene, Medical Technology, and Occupational Therapy.

Requirements for Admission:

1. A Bachelor's degree in Dental Hygiene or Medical Technology from an accredited college or university having a program comparable to the bachelor's degree programs in these Allied Health professions at the Medical College of Georgia. For Occupational Therapy, graduation with a bachelor's degree from a curriculum in occupational therapy approved by the Council on Medical Education of the American Medical Association in collaboration with the American Occupational Therapy Association, or with a bachelor's degree and professional preparation comparable to the program at the Medical College of Georgia.
2. Adequate academic preparation and level of achievement in the field of proposed graduate study as determined by the appropriate graduate faculty of the Medical College of Georgia.
3. Evidence of current registration, licensure, or certification to practice Dental Hygiene, Medical Technology, or Occupational Therapy in one or more states. In addition, for Dental Hygiene, at least one year's experience in clinical practice of dental hygiene or its equivalent.
4. Satisfactory scores on the Aptitude Test of the Graduate Record Examination as determined by the department.
5. A satisfactory physical examination.

   The final selection of students for admission will be subject to the discretion of the dean of the School of Graduate Studies. Letters of acceptance will be sent by the dean upon recommendation by the department.

Requirements for Graduation:

1. Graduate Study
   Sixty quarter hours beyond the bachelor's degree are required. The complete program includes required and elective courses in education offered by the School of Nursing and Augusta College, as well as offerings by other Schools and Divisions of the Medical College of Georgia. Twenty quarter hours are spent in discipline-oriented instruction; 20 quarter hours of pedagogic instruction including a teaching practicum; and 20 quarter hours of related electives.
2. Residence
   A minimum of three quarters of full-time study or the equivalent in residence on this campus is required.

3. Program of Study
   A program of study which has been approved by the advisory committee and the dean is required.
4. Application for Graduation
   Each candidate for a graduate degree must apply for graduation at the School of Graduate Studies' office.
5. Satisfactory Fulfillment
   Satisfactory fulfillment of any additional requirements of the student's major department or the institution is required.

Course Descriptions

All courses listed below are approved for credit towards a School of Graduate Studies degree.

Anatomy

D. Bockman, Chairperson; G. Colborn; T. Gale; R. Holt; J. Horner; T. McDonald; J. McKenzie; P. Moore; W. Paull; T. Rosenquist; G. Sohal; T. Weidman; D. Welter.

ANM 701, 702. Gross Anatomy. (2-6-5 hours each quarter)
(Fall and Winter)
A lecture and laboratory course which requires dissection of the human body.

ANM 703. Neuroanatomy. (2-4-4 hours)
(Spring)
A study of the gross and microscopic structure of the human nervous system and organs of the special sense. Taught in parallel with PHY 703 as an integrated Neurosciences course.

ANM 807. Embryology. (3-0-3 hours)
(Fall)
A study of the fundamental principles of mammalian embryonic development. Subject matter includes germ cell formation, fertilization, implantation, placentation and morphogenesis of the various systems of embryos of various ages.

ANM 813. Histology. (2-6-5 hours)
(Fall)
A study of the cells, tissues and organs of man as related to their function.

ANM 814. High Resolution Microscopy. (1-8-5 hours)
(Summer)
A course in the basic technique in electron microscopy. Emphasis is placed on preparing of tissues for electron microscopy, operating the scanning and transmission electron microscopes, and preparing and interpreting electron micrographs.

ANM 816. Histochemistry. (1-6-4 hours)
(Spring)
A lecture and laboratory course intended to provide advanced graduate students greater comprehension of the quantity, distribution, and function of the major chemical constituents of cells and tissues; to include proteins, fats, carbohydrates, nucleic acids, and enzymes. The laboratory will teach the more useful and effective methods for localization and quantitation.

ANM 817. Special Topics in Gross Anatomy. (1-4-3 hours)
(Spring)
Prerequisites: ANM 701, 702
This course involves special dissections on areas of human anatomy not normally dissected in Gross Anatomy 701. These dissections include the back, ear, sub-occipital region, pelvis, foot, and other topics. In addition, students will attend clinical conferences related to these areas of dissection.

ANM 818. Advanced Developmental Anatomy. (3-0-3 hours)
(Spring)
Prerequisite: ANM 807
This course entails the study of both normal and abnormal human development. The program involves gross dissection and microscopic slide examination of the human fetus. The lectures will include in-depth discussion of embryologically important clinical areas such as the cardiovascular and nervous system. In addition, students will observe various surgical corrective procedures.

ANM 819. Special Topics in Neuroanatomy. (1-4-3 hours)
(Spring)
Prerequisite: ANM 703 or permission of instructor
This course will be a brief review of basics including a complete brain dissection and slide study. The major time will be used to explore in depth some recent research relating to certain areas or systems. This will be accomplished by lectures by the faculty, special lecturers, and some student lectures in areas of their special interest.

ANM 820. Special Topics in Cell Biology. (3-0-3 hours)
(Winter)
Prerequisites: Histology and Biochemistry or equivalent
This course will provide an intensive review of the literature, and in some instances laboratory experience with a set of one or more tissues, cellular structures, tissues of cellular processes, or preparative or analytical methods. Topics will be selected during the prior quarter based on departmental and student needs.

ANM 822. Advanced High Resolution Microscopy. (1-8-5 hours)
(As required)
Prerequisite: ANM 814
A course in advanced and specialized techniques of electron microscopy. Included are recently described techniques for the use of scanning and transmission electron microscopy in medical research.

ANM 830. Immunobiology. (2-4-4 hours)
(Summer)
Prerequisite: MIB 702 (2 hours)
A lecture and laboratory course designed to study the histological and cytological events which are associated

with the immune response, and to gain experience in some of the techniques used in immunobiological research.

ANM 831. Neuroendocrinology. (2-0-2 hours) (Winter)
Prerequisites: ANM 703; PHY 701, 702, 703; permission of the instructor

A lecture/selected reading course designed to study current topics in neuroendocrinology under investigation by leading investigators.

ANM 850. Developmental Neurobiology. (3-0-3 hours) (Spring)
Prerequisites: ANM 703, PHY 703

A lecture/paper presentation course dealing with the mechanisms of embryonic induction and determination, neuronal differentiation, migration, and trophic factors and specificity of connection formation including a survey of the contemporary research techniques used for the study of the nervous system.

ANM 901, 902, 903. Seminar in Anatomy. (1-0-1 hours each)

ANM 921. Investigation of a Problem. (Credit to be arranged)

ANM 930. Research. (Credit to be arranged) (For Dissertation or Thesis)

Cell and Molecular Biology

T.H.J. Huisman, Chairperson; A. Abdel-Latif; E. C. Abraham; G. Best; O. Black; G. Brownell; J. Bulkacz; G. Burnett; S. Bustos-Valdes; T. Dirksen; J. Erbland; F. Garver; S. Gelfant; K. Hall; W. Harms; J. Hill; E. Howard; J. Howard; J. Israel; K. Lanclos; D. Lapp; F. Leibach; J. McPherson; C. Nair; A. Reese; C. Roesel; G. Schuster; D. Scott; C. Sharma; R. Shimp; S. Singal; L. Smith; R. Sobel; T. Stoming.

CMB 701. Biochemistry. (5-0-5 hours)
CMB 702. Biochemistry. (5-0-5 hours)
(Fall and Winter)

A course sequence covering the chemistry and reactions of the constituents of living matter, metabolism and control mechanisms in whole organisms, organs, cells and subcellular systems, metabolic patterns and biosynthetic pathways. (Formerly Phase I, Medical Biochemistry and Medical Microbiology)

CMB 704. Experimental Biochemistry. (1-4-3 hours)
CMB 705. Experimental Biochemistry. (1-4-3 hours)

The first course deals with the preparation and characterization of substances of biochemical significance. The second course includes experiments in biological oxidation, glucose metabolism, phosphatide and protein systhesis. (Formerly BCH 801 and 802)

CMB 745. Biochemistry. (8-0-8 hours) (Fall)

This course covers the chemistry and reactions of the constituents of living matter, metabolism and control mechanisms at levels of biological organization from subcellular to organism. Emphasis is given to medical applications. (Formerly BCH 801A and 802A)

CMB 750. Medical Biochemistry. (8-0-8 hours)

This course has two main objectives: (a) to provide and develop the basic biochemical principles needed in understanding the normal process occurring with cells and the coordination of all of these processes into a normally functioning biological machine; (b) to use these principles to analyze commonly occurring health-related problems in terms of their biochemical components. Eight hours of lecture are presented weekly.

CMB 751. General Microbiology. (5-0-5 hours)

Principles of microbiology, microbial physiology genetics and immunology. (Formerly MIB 701)

CMB 770. Medical Microbiology. (8-0-8 hours) (Winter and Spring)

A lecture and laboratory course which considers the characteristics and properties of microorganisms, their role in the disease process and selected aspects of diagnosis and treatment of infectious disease. Eight hours of lecture per week and conferences at periodic intervals.

CMB 771. General Immunology. (2-0-2 hours) (Winter)

Principles of Immunology and Immunity. (Formerly part of MIB 702)

CMB 775. Medical Microbiology. (7-0-7 hours)
CMB 776. Medical Microbiology. (3-0-3 hours) (Winter and Spring)
Prerequisite: CMB 751

Principles of microbiology with emphasis on the pathogenic bacteria viruses, rickettsiae and fungi. Properties of the common pathogens and methods for their cultivation isolation and identification. (Formerly BCH 702A and 702B)

CMB 801. Chemical Kinetics. (3-0-3 hours)

Theories of reaction velocity and their application to the understanding of reaction mechanisms. (Formerly BCH 807)

CMB 803. Physical Methods of Structure Determination. (3-0-3 hours)

Use of physical methods (UV, IR NMR, ORD, ESR) to determine the structure of biochemically important monomers and polymers. (Formerly BCH 808)

CMB 805. Physical Biochemistry. (3-0-3 hours)

Structure, properties, energetics, kinetics with particular reference to biopolymers. Three lectures, one conference, assigned readings and calculations. (Formerly BCH 809)

CMB 807. Organic Reaction Mechanisms. (3-0-3 hours)
CMB 808. Organic Reaction Mechanisms. (3-0-3 hours)
CMB 809. Organic Reaction Mechanisms. (2-0-2 hours)
(To be taken in numerical sequence)
Modern theories of organic chemistry with emphasis on reaction mechanisms of biochemical interest. (Formerly BCH 830, 831, 832)

CMB 820. Series: Topics in Biochemistry. (3-0-3 hours)
Prerequisite: BCH 802 or BCH 755
Advanced treatment of selected topics.

CMB 820. Cell Biology.
CMB 821. Nucleic Acids.
CMB 822. Cancer Biology.
CMB 823. Biomembranes.
CMB 824. Carbohydrates.
CMB 825. Lipids.
(Formerly BCH 803 series)

CMB 835. Cell and Tissue Culture. (3-0-3 hours)
Principles and techniques of cell and tissue culture. Emphasis on tissue culture techniques used in the study of viruses, bacteria and immunologic problems. (Formerly MIB 808)

CMB 851. Immunology. (3-0-3 hours)
Prerequisite: CMB 776
Biological, physical and chemical properties of antigens and antibodies; mechanisms of precipitation and agglutination reactions, cytotoxic reactions, medicated by antibody and complement; mechanisms of antibody formation; nature and mechanisms of hypersensitivity reaction and immunology and chemistry of blood group substance. (Formerly MIB 801)

CMB 853. Bacterial Genetics. (3-0-3 hours)
Prerequisite: CMB 776
A consideration of nucleic acid metabolism and heredity in microorganisms including conjugation, transduction and transformation. (Formerly MIB 802)

CMB 854. Bacterial Genetics Laboratory. (0-4-2 hours)
(Formerly part of MIB 802)

CMB 855. Virology. (3-0-3 hours)
Prerequisite: CMB 776
Studies of animal viruses, and newer techniques for cell culture and identification. (Formerly MIB 803)

CMB 857. Mycology. (3-0-3 hours)
Prerequisite: CMB 776
Lectures and experimental studies of fungi pathogenic for man. (Formerly MIB 804)

CMB 859. Immuno-Chemistry. (3-0-3 hours)
Prerequisite: CMB 851
Advanced immunology with emphasis on the chemical aspects. (Formerly MIB 805)

CMB 861. Microbial Physiology. (3-0-3 hours)
Prerequisite: CMB 776
Intermediary metabolism peculiar to microorganisms and its relationship to the effect of the chemical environment on the growth and death of microorganisms. (Formerly MIB 806)

CMB 862. Microbial Physiology Laboratory. (0-4-2 hours)
(Formerly part of MIB 806)

CMB 863. Parasitology. (3-0-3 hours)
Prerequisite: CMB 776
Studies of the animal parasites of man and their mode of transmission. (Formerly MIB 703)

CMB 890. Workshop in Cell and Molecular Biology (1 hour) (1-0-1 hours)
(Formerly CMB 904)

CMB 901. Seminar in Cell and Molecular Biology. (1 hour) (1-0-1 hours)
CMB 902. Seminar in Cell and Molecular Biology. (1 hour) (1-0-1 hours)
CMB 903. Seminar in Cell and Molecular Biology. (1 hour) (1-0-1 hours)

CMB 921. Investigation of a Problem. (Credit to be arranged)

CMB 930. Research. (Credit to be arranged)
(For Dissertation)

Endocrinology

V. Mahesh, Chairperson; T. Abney; V. Bhalla; J. Byrd; A. Costoff; J. Ellegood; R. Greenblatt; T. Mills; T. Muldoon; E. Servey.

END 707. Introduction to Endocrinology. (1-0-1 hours)
(Fall)
This course will give a general introduction to the concept of hormones, endocrine glands, and various mechanisms involved in regulation and control of endocrine secretion.

END 801. Clinical Endocrinology. (2-0-2 hours)
(Fall)
Clinical survey of the function of the hypothalamus, pituitary, adrenals, gonads, thyroid and pancreas, and the diagnosis and treatment of endocrine disorders associated with these glands.

END 802. Advanced Clinical Endocrinology. (6-0-6 hours)
(Fall)
A continuation of END 801 at an advanced level. Included is participation in the diagnosis, work-up, treatment and discussion of selected patients with various endocrine disorders.

END 807. Clinical Aspects in Human Reproductive Physiology. (5-0-5 hours)
(Fall)
The essentials of human reproduction and the application of present day knowledge in the promotion of fertility as well as fertility controls.

END 808. Human Cytogenetics. (3-0-3 hours)
(Spring)

A study of the relationships between chromosome morphology, function and disease. Consideration of chemical and physical nature of the chromosome, chromosomal aberrations, ploidy, significance of sex chromatin defects and genetics of cells in culture.

END 809. Human Cytogenetics—Laboratory Techniques. (0-6-3 hours)
(Winter)

A laboratory study of methods used in human cytogenetics including methods for culture and chromosome analysis and somatic cells, sex chromatin, autoradiography, photomicography, meiotic preparations and solid tissue culture.

END 810. Biochemical Methods in Endocrine Research. (1-5-3 hours)
(Fall)

Work in specialized methods such as fractionation and individual estimation of steroids, steroid receptor binding, chromatography and use of isotopes.

END 812. Chemistry of Steroids. (5-0-5 hours)
(Winter)

Prerequisite: END 815

A survey of the chemical synthesis, degradation and general reactivity of various classes of steroids. Physical methods of characterization and methods of steroid determination are discussed with particular emphasis on steroids of biological importance.

END 813. Mechanism of Steroid Hormone Action. (4-0-4 hours)
(Spring)

A detailed analysis of the intracellular events known to precede manifestation of steroid hormone action. Particular emphasis is placed upon receptor interactions and their cytoplasmic and nuclear ramifications. All classes of active steroid hormones are considered, with a view toward correlating differences in action with differences in mechanism.

END 814. Endocrinology of Polypeptide Hormones. (4-0-4 hours)
(Fall)

Studies of the hormones of the hypothalamus, pituitary, the adrenal medulla, pancreas, pineal, thyroid, and parathyroid.

END 815. Endocrinology of Steroid Hormones. (4-0-4 hours)
(Fall)

Studies of the biosynthesis, transport, metabolism and secretion of steroid hormones.

END 816. Mechanism of Action of Polypeptide Hormones. (4-0-4 hours)
(Spring)

A survey of hormone receptor interactions and the effect on cellular functions. Included are the activation and regulation of adenylate cylcase, phosphodiesterase, protein kinase, RNA and protein systhesis, and other cellular processes.

END 817. Reproductive Physiology. (4-0-4 hours)
(Fall)

A biologically oriented course dealing with spermatogenesis, ovulation, fertilization, behavior, implantation, and pregnancy.

END 818. Population Explosion and Contraception. (2-0-2 hours)
(Summer)

A survey of the problem of population explosion in the United States and around the world with discussion of the safety and efficiency of current methods of contraception.

END 819. Comparative Endocrinology. (4-0-4 hours)
(Winter)

A study of the fine structure and histology of endocrine glands as related to their function in man and other species.

END 901. Seminar in Endocrinology. (1-0-1 hours)
(Fall, Winter, Spring)

END 921. Investigation of a Problem. (Credit to be arranged)
(All quarters)

END 930. Research. (Credit to be arranged)
(All quarters) (For Dissertation or Thesis)

Medical Illustration

P. Brucker, Chairman; O. Garlington; D. Mascaro; W. Stenstrom (Director of Teaching Program).

MIL 650, 651, 652. Medical Illustration Techniques I. (1-54-28 hours)

Lectures, demonstrations and studio experience in the techniques and media of the medical illustrator including carbon dust, pen and ink, watercolor, air-brush, technical pens, and Leroy lettering equipment.

MIL 658. Tri-Dimensional Techniques. (2-8-6 hours)

Lecture and studio experience in the use of materials and techniques of sculpturing and casting three-dimensional biomedical subjects.

MIL 659. Publication Art Techniques. (1-2-2 hours)

Lecture and studio experience in the preparation of illustrations for commercial reproduction from basic layout to camera-ready art.

MIL 665. Medical Photography. (1-6-4 hours)

Lecture and studio experience in basic medical photography and film processing.

MIL 678. Surgical Techniques. (1-2-2 hours)

Lecture and clinical experience in performing two or more surgical procedures upon anesthetized animals. Also provides orientation to sterile technique and other operating room procedures.

MIL 750, 751, 752. Surgical Observation/ Drawing. (0-28-14 hours)
Observation and sketching of procedures and techniques related to various sub-specialties of surgery performed in the operating rooms of the medical center. The sketches are used as reference material for illustrations accomplished in the course in Medical Illustration Techniques II.

MIL 753. Printing and Publishing. (1-0-1 hours)
A study of the processes and methods used to reproduce art in printed form; also covers related areas of publishing such as typography, composition and platemaking.

MIL 758. Advanced Medical Photography. (1-6-4 hours)
Studio experience in the use of equipment and techniques of medical photography; includes copywork, patient and surgical photography, photomicrography, and basic motion picture photography.

MIL 761, 762, 763. Medical Illustration Techniques II. (2-54-29 hours)
Advanced studio experience in art techniques involving line, continuous tone and color in renderings of subjects related to anatomy, pathology and surgery.

MIL 764. Survey of Learning Resources. (3-0-3 hours)
An introduction to current instructional technology with emphasis on audio-visual resources. Includes experience in planning, production and presentation of visual material.

MIL 775. Presentation of Visual Information. (4-0-4 hours)
Lecture and studio experience in design and preparation of scientific information for presentation in the major visual communication media.

MIL 780. Television. (1-2-2 hours)
Lectures and studio demonstrations of equipment and production methods of closed circuit television, with emphasis on graphic techniques and program planning involving the medical illustrator.

MIL 811. Pathology. (8-5-10 hours)
Lectures and laboratory demonstrations on the basic principles of pathology and general physical manifestations of disease. Course requires attendance at autopsies.

MIL 801. Medical Illustration— Independent Study. (0-32-16 hours)
Time and credit for independent study and special experiences are given to each student during the third year of study. The purpose is to provide the student with the opportunity to study in depth various aspects of the medical illustrator's role in biomedical communications and to prepare a professional portfolio of original artwork.

MIL 802. Departmental Development and Administration. (1-2-2 hours)
A study of procedures and problems associated with the development and administration of medical illustration service units.

MIL 804. Scientific Exhibit Design. (1-6-4 hours)
A supervised practicum in planning and designing a scientific exhibit. Included are practical aspects of production: scale drawings, selection of materials, functional design, shipping and display space limitation.

MIL 928. Medical Illustration— Graphic Project. (0-20-10 hours)
A visual presentation of medical information selected from the educational experiences encountered during participation in the Medical Illustration Program. The project should be indicative of the student's proficiency in the media and techniques of medical illustration created for one or more of the various methods of visual communication (exhibition, publication, slides, motion pictures, tri-dimensional model, television) and should include subject matter in anatomy, pathology, surgery, dentistry or a combination of these.

Oral Biology

G. Burnett, Chairman; S. Bustos-Valdez; T. Dirksen; L. Gangarosa; W. Karp; S. Kolas; R. McKinney; D. Pashley; G. Schuster; M. Sharawy; B. Singh; J. Weatherred.

OBIO 811. Head and Neck Anatomy. (2-0-2 hours)
An advanced course in applied anatomy of the head and neck region.

OBIO 822. Oral Biochemistry. (2-0-2 hours)
The biochemistry of the various structural and nonstructural components of the body as related to oral health and disease.

OBIO 833. Physiology of the Stomatognathic System. (2-0-2 hours)
A guided survey of the physiology of the stomatognathic system.

OBIO 841. Microbiological and Immunological Aspects of Oral Disease. (2-0-2 hours)
An advanced course on oral microbiology, infection and resistance, and oral diseases of microbial origin.

OBIO 852. Molecular Pathology. (2-0-2 hours)
Concepts of disease, particularly oral diseases, at cellular and subcellular levels.

OBIO 854, 855, 856. Oral Pathology. (1-0-1 hours each)
An advanced course of the oral diseases, including etinology, pathogenesis, diagnosis, prognosis, and treatment.

OBIO 863. Dental Pharmacology. (2-0-2 hours)
Advanced pharmacology of interest to clinical and investigative dentistry.

OBIO 901, 902, 903. Graduate Oral Biology Seminars. (1-0-1 hours each)
These seminars will include advanced topics of interest to dentistry and will be presented by both graduate

students and faculty. An in-depth coverage of the literature is expected for each presentation.

OBIO 921. Investigation of a Problem. **(Credit to be arranged.)**

OBIO 930. Research. (For Dissertation or Thesis) **(Credit to be arranged.)**

Pharmacology

J. M. Kling, Acting Chairperson; R. P. Ahlquist; G. O. Carrier; G. W. Cross; L. P. Gangarosa; W. F. Geber; D. C. Jerram; A. M. Karow; T. J. Mellinger; M. W. Riley; J. H. R. Sutherland.

PHM 701. General Pharmacology. **(4-0-4 hours)**
A survey course covering the general principles of pharmacodynamics, chemotherapy and toxicology. The pharmacology of the following will be introduced: central nervous system, peripheral motor nervous system, cardiovascular-renal system, gastrointestinal system, and endocrine system.

PHM 711. Cryopharmacology. **(3-0-3 hours)**
Prerequisite: Consent of instructor
The biophysics of freezing injury and the use of cryoprotective drugs.

PHM 721. Drug Induced Teratogenesis. **(3-0-3 hours)**
Prerequisite: Consent of instructor
Consideration of theories of drug induction on congenital malformations in the mammalian fetus. Experimental methods of evaluating drug teratogenicity will be studied.

PHM 801. Molecular Pharmacology. **(3-0-3 hours)**
Prerequisites: PHM 701 or equivalent and consent of instructor
Mechanism of achieving a biological effect through the chemical interaction of a drug with a biological receptor.

PHM 802. Methods in Pharmacological Research. **(1-4-3 hours)**
Prerequisites: PHM 701 or equivalent and consent of instructor
Physiological and biochemical methods employed in pharmacological investigations.

PHM 803. Neuropharmacology. **(3-0-3 hours)**
Prerequisites: PHM 701 or equivalent and consent of instructor
Selected topics related to the action of chemical agents on the nervous system.

PHM 804. Advanced Pharmacology. **(2-0-2 hours)**
Prerequisites: PHM 701 or equivalent and consent of instructor
Research objectives in pharmacology. Current concepts and trends in pharmacological research.

PHM 805. Mechanisms of Drug Toxicity. **(3-0-3 hours)**
Prerequisites: PHM 701 or equivalent and consent of instructor
A study of the adverse effects of drugs on organ systems and metabolic pathways.

PHM 808. Autonomic Pharmacology. **(3-0-3 hours)**
Prerequisites: PHM 701 or equivalent and consent of instructor
A study of neurohumoral transmission, adrenergic and cholinergic agonists and blocking agents, and mechanisms of action of drugs affecting the peripheral motor nervous system.

PHM 809. Cardiovascular-Renal Pharmacology. **(3-0-3 hours)**
Prerequisites: PHM 701 or equivalent and consent of instructor
Evaluation of the interrelationships of the action of drugs on the heart, peripheral circulation, and renal function.

PHM 901, 902, 903. Seminar in Pharmacology. **(1 hour each)**

PHM 921. Investigation of a Problem. **(Credit to be arranged)**

PHM 930. Research. (For Dissertation or Thesis) **(Credit to be arranged)**

Physiology

R. Little, Chairman; G. Bond; G. Doetsch; P. Dow; I. Ehrhart; L. Ellison; J. Ginsburg; C. Hendrich; W. Hofman; W. Jackson; G. King; D. Miller; T. Nosek; T. Ogle; D. Pashley; S. Porterfield; S. Rao; S. Reichard; S. Stoney; R. Vargo; J. Weatherred; T. Wiedmeier.

PHY 701. Survey of Physiology I. **(6-1-6 hours)**
(Winter)
Prerequisites: Inorganic and organic chemistry, physics and one year of biological sciences or equivalent or permission of Department Chairman.
First of a two quarter sequence presenting an intensive treatment of mammalian organ systems; the cell, electrophysiology; peripheral nerve and reflexes; muscle; cardiovascular.

PHY 702. Survey of Physiology II. **(8-2-6 hours)**
Prerequisites: Inorganic and organic chemistry, physics and one year of biological sciences or equivalent or permission of Department Chairman
Respiration, body fluids and kidney, gastrointestinal and endocrine physiology.

PHY 703. Survey of Neurophysiology. **(4-1-4 hours)**
(Winter)
Prerequisite: Permission of Department
Peripheral and central nervous system physiology including special senses.

PHY 802. Cardiodynamics. (3-0-3 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

Physiology of the heart, including structure, development, action as muscle, and dynamics of its pumping action.

PHY 803. Peripheral Circulation. (3-0-3 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

A study of the architecture and hemodynamics of peripheral vasculature.

PHY 804. Muscle Physiology. (3-0-3 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of instructor

Excitation contraction coupling, Contractile proteins and chemistry of contraction. Theory of contraction of skeletal, heart and smooth muscle.

PHY 805. Blood Flow Regulation. (3-0-3 hours)
Prerequisites: PHY 701, 702 and/or permission of the instructor

A study of the determinants affecting cardiac output and peripheral flow, with consideration of the techniques of measuring the flow.

PHY 806. Respiration. (3-0-3 hours)
Prerequisites: PHY 701, 702 and/or permission of the instructor

A study of the mechanics and the control of respiration including consideration of experimental measurement.

PHY 807. Body Fluid Regulation. (3-0-3 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

A study of current concepts of regulation of body fluid volume and composition. Laboratory experiences in measurement of renal function and body fluid volumes will provide data to be interpreted in the light of current and classical literature.

PHY 813. Electrophysiology. (3-0-3 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

Theoretical basis of electrophysiological phenomena; recording apparatus and technique, and the electrophysiology of cell tissues and excitable structures.

PHY 815. Radiosotopes in Biological Research. (3-0-3 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

The theory, utility and methodology for the use of radioisotopes in biological research.

PHY 816. Motor Systems. (3-0-3 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

Survey of neurophysiological mechansism which underlie cerebral, cerebellar and basal ganglia control of voluntary movement.

PHY 820. Radiobiology. (3-0-3 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

Cellular and physiological effects of ionizing radiation.

PHY 821. Sensory Systems. (3-0-3 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

A guided survey of the basic principles of functional organization of the somatic and special sensory systems. Emphasis on coding and synaptic processing of sensory information.

PHY 822. Biological Substrates of Learning and Motivation. (3-0-3 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

A survey of the electrophysiological, neuroanatomical and biochemical correlates of learning and motivation. Included will be an assessment of techniques used in this area of study.

PHY 823. The Application of Control Theory to Physiological Systems. (3-0-3 hours)
Prerequisite: Permission of the instructor

The study of the techniques to mathematically describe a physiological process and the aspects of control theory that are effective in the analysis of a system. Computer simulation of selected physiological systems.

PHY 824. Physiology of Thyroid and Parathyroid Hormone. (3-0-3 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

Control of secretion, synthesis and metabolism of thyroid hormones along with present concepts of general metabolic functions of thyroid hormones. The latter half of the course will involve a study of the control of secretion of thyrocalcitonin and parathyroid hormones and how these two hormones interact as regulators of plasma and tissue levels of calcium, magnesium and phosphorus.

PHY 825. Electronics as Applied to Medicine. (2-2-4 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

A study of electronic methods currently employed in Physiology. After completing lecture and laboratory work on basic concepts in electronic technology the student will elect further experience in two or more of the following options: electronics for cardiovascular studies; digital electronics; electrophysiology; laboratory computers.

PHY 899. Special Topic Seminar Courses in Physiology. (Credit to be arranged)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

Special topic courses taught as seminars in the areas of cardiovascular, renal, respiratory, muscle, neuro and endocrine physiology.

PHY 901, 902, 903. Seminar in Physiology. (1-0-1 hours)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

PHY 921. Investigation of a Problem. (Credit to be arranged)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

PHY 930. Research. (Credit to be arranged)
(For Dissertation or Thesis)
Prerequisites: PHY 701, 702, 703 and/or permission of the instructor

Dental Hygiene

B. Pollard, Chairperson; J. Brown; M. Cannon; M. Damon; R. Rackley; C. Snyder; D. Van Horn; W. Williams; G. Winkley.

DH 800. Clinical Dental Hygiene. (5-0-5 hours)
A survey of the various learning theories and their application to the teaching of clinical dental hygiene. The course also includes an inventory of supplies, equipment and audio-visual materials for effective clinical teaching.

DH 801. Advanced Instructional Media. (5-0-5 hours)
Prerequisite: EDU 700 or equivalent
This course focuses on the improvement of Dental Hygiene teaching through the application of instructional development procedures with emphasis on instructional media.

DH 802. Applied Project in Dental Hygiene. (5-0-5 hours)
Prerequisites: EDU 700 or equivalent. This course is to be taken in conjunction with DH 801.
Preparation by the student of an independent project utilizing audio-visual resources to develop a module of instruction which can serve as a self-instructional unit for undergraduate students in dental hygiene.
Proposal to be presented to advisory committee for approval prior to admission to the course.

DH 803. Dental Hygiene Leadership. (5-0-5 hours)
Prerequisites: Educational Psychology and/or teaching experience in allied health curricula is required before this course can be taken.
This course is structured as a forum-laboratory in which to discuss and to test current concepts in academic program design and management. It is assumed that the student is either familiar with or will become familiar with the work of Bloom, Tyler, Mager, Bechard, Parker, Rubin, McGuire, and Nedelsky.

DH 804. Growth and Development. (3-0-3 hours)
Prerequisite: Oral Anatomy
This course will consider the physical and psychological growth and development of the individual from birth to adolescence. Strong emphasis will be placed on the growth and development of the dentition and face. Basic concepts of psychological development will be stressed in order to help the dental hygienist understand her young patients and design a preventive dental program suitable for their maturational level.

DH 805. Dental Health Delivery in a Changing Society. (5-0-5 hours)
A course designed to explore the continuing influence of society upon the dental profession. Related factors of dental need, manpower and methods of payment will be addressed. Practical applications to the discipline of Dental Hygiene will be made.
The first hour of each two-hour session will be lecture and the second hour will be seminar-discussion.

DH 806. Advanced Preventive Dentistry Concepts for Dental Hygiene. (4-0-4 hours)
A course which presents a global picture of preventive dentistry and its interrelation in total patient care. Current research will be presented on plaque and its relation to dental disease, caries activity testing, diet counseling, pit and fissure sealants, topical fluorides, gross caries control and plaque control instruction.

DH 809. Advanced Clinical Field Experience. (5-0-5 hours)
This field experience is individually designed to provide clinical work experiences at local area hospitals or public health agencies to fit special clinical interests of the student. The work will be directly co-supervised by an appropriate member of the medical or dental faculty and by a member of the department staff.

DH 930. Independent Study in Dental Hygiene. (5-0-5 hours)
Prerequisite: EDU 702
This course will require the satisfactory completion of an original project in dental hygiene. Results of the stury and a critical review of the pertinent literature are incorporated into the student's work.
Proposal to be presented to advisory committee for approval prior to admission to the course.

Medical Technology

A. Anderson, Chairperson; J. Crowley; P. Greenup; E. Kenimer; A. R. Winningham.

MTC 801. Laboratory Administration. (1-2-2 hours)
An application oriented course of study in the concepts, procedures, and techniques of management.

MTC 810. Clinical Chemistry. (3-6-6 hours)
Qualitative and quantitative aspects of analytical biochemistry as they are applied to diagnosis and therapy of human diseases. Includes didactic and laboratory studies; and individual directed projects.

MTC 820. Clinical Hematology. (3-6-6 hours)
Advanced concepts in hematology, practical application, clinical diagnosis and individual directed projects in hematology.

MTC 840. Clinical Immunohematology. (3-6-6 hours)
Principles and techniques of applied immunology related to problems of an immunohematology service (blood bank). Includes didactic and laboratory studies, and individual directed projects.

MTC 850. Clinical Microbiology. (3-6-6 hours)
In-depth study of pathological bacteriology, mycology, mycobacteriology, and anaerobic bacteriology as it relates to diagnosis and therapy of human disease. Includes didactic and laboratory studies; and individual directed projects.

Occupational Therapy

N. Prendergast, Chairperson; B. Dias; K. A. Evans.

OTH 700. Curriculum Development in Occupational Therapy. (4-0-4 hours)

A review of the AMA/AOTA *Essentials* and their application in curriculum development. A study of present curricula in occupational therapy and the development of curriculum models based on various approaches and concepts.

OTH 701. Occupation as a Health Determinant. (4-0-4 hours)

A discussion of the concept of occupation as a health determinant. The identification of the occupational continuum and an analysis of occupational performance. A study of selected aspects of performance function and dysfunction as it relates to the individual's physical and psychosocial well-being and health status.

OTH 702. Human Development and the Acquisition of Performance Skills. (4-0-4 hours)

A review of neuro-motor, visual, perceptual-motor-cognitive and psychosocial development. A comparative study of selected theories related to the acquisition of performance skills, and interpersonal, social and cognitive skills learning. A discussion of the physical and neuro-cognitive relationship between task-oriented activities and the acquisition of physical-motor skills.

OTH 703. Significance of Activity and the Development of Human Potential. (5-0-5 hours)

Physiologic and psychologic aspects of motor activity and learning; the role of play in the acquisition of adaptive skills, characteristics of age-specific activities; relationship of activities to development of competency; relationship of activity and in-activity to man's physical and psychological well-being; analysis of real and symbolic meaning of activities.

OTH 704. The Occupational Therapy Process. (3-0-3 hours)

The application of principles to the evaluation and management of performance problems and component dysfunction. The relationship of activity analysis to development of programs for prevention and health maintenance, restoration and/or development of component function and occupational performance.

OTH 705. Problems in Performance Dysfunction. (4-0-4 hours)

Independent study in a selected area of component dysfunction. Student may select from the following areas:

1. Motor dysfunction
2. Sensory-integrative dysfunction
3. Cognitive dysfunction
4. Psychological dysfunction
5. Social dysfunction

OTH 706. Special Studies in Health Care. (3 to 5 hours)

Individual investigation into current and proposed occupational therapy approaches to comprehensive health care. Studies of current and potential roles for the occupational therapist. Includes practical experiences in the broader health care community.

OTH 708. Special Studies in Advanced Treatment Approaches. (3 to 5 hours)

Individual investigation into new and/or specialized treatment approaches for individuals with physical or psychosocial dysfunction. Includes practical experiences in utilizing these treatment approaches. Credits awarded will be determined on the basis of extent and type of study proposed.

health systems and information sciences

Director—James B. Mathews
Coordinator—Richard Pogue

Program in Health Systems and Information Sciences

The Program in Health Systems and Information Sciences provides courses and course sequences in health systems engineering, management and information sciences, computer science, biostatistics, biomedical engineering and computer-based education. Current emphasis is on meeting the growing needs of students in other academic programs within the college for courses and course sequences in these disciplines. It is anticipated that the program will soon offer degrees to health professionals who desire in-depth training in the health systems and information sciences to better prepare them for their role within the health care system.

Program faculty engage in service and research activities as well as academics, under the philosophy that an integrated program combining education, research and service is essential to maintaining professional expertise in these rapidly evolving disciplines, as well as providing unusual opportunities for students to participate in active projects concerned with meeting institutional service needs. Program faculty engage in formal academic teaching; supervise student practica and serve on thesis advisory committees; conduct training courses, seminars and electives for faculty, staff and students; participate in joint programs with Augusta College and Georgia Institute of Technology; and engage in intramural and extramural research projects in the basic and clinical sciences, and in health facilities, health manpower and clinical services planning and operation. As a professional staff resource they provide management and information systems development services; computer services; engineering services including design construction and maintenance of specialized equipment of an electronic and mechanical nature; and consultative service in biostatistics, biomedical engineering, management and computer sciences, and computer-based education.

Course Descriptions

J. Mathews, Director; R. Pogue, Coordinator; R. Bramblett; R. Harp; G. King; J. Lyon; P. Rutsohn.

HS 310. Introduction to Management. (3-0-3 hours)
Prerequisite: Approval of instructor

An introductory study of the management process and the fundamental functions of planning, organizing, actuating and controlling with emphasis on applications to the health care environment.

HS 400. Introduction to Management Decision Concepts. (3-0-3 hours)
Prerequisite: Approval of instructor

The structure of management decisions will be examined from the viewpoint of the rational manager. A framework of decision concepts will be developed, within which a logical, systematic approach can be formulated for a wide range of decision problems and opportunities. Illustrative examples will be used throughout the course to provide the health systems context.

HS 410. Departmental Systems Management Techniques. (3-0-3 hours)
Prerequisite: Approval of instructor

An application-oriented course in management problem solving, tailored on demand for presentation to specific student groups. Case problems in specific hospital departments are the vehicles for presentation of systematic problem solving techniques and approaches. Example techniques are: work standards, staffing methods and performance measures; scheduling work activities, departmental organization; monitoring and controlling quality; cost reduction methods.

HS 420. Health Systems Analysis. (3-2-3 hours)
Prerequisite: Approval of instructor

A survey of systems analysis concepts and techniques useful as aids in the management of health-related activities will be presented. A framework for using and understanding systems analysis methods will be developed, beginning with managerial responsibilities and objectives, moving through simple do-it-yourself analysis methods, and surveying more advanced techniques employed by in-house and extramural consultants.

HS 440. Introduction to Data Processing Systems. (3-0-3 hours)

A study of the application of modern data processing techniques, data management, and information storage and retrieval to the needs of medical institutions.

HS 450. Elementary Medical Statistics. (3-0-3 hours)

Collection and analysis of health care data; rates, ratios, and indices; design of surveys; descriptive statistics; elementary probability distributions; confidence limits and significance tests; design of investigations. (Formerly STA 301.)

HS 461. Electronics for Allied Health Scientists. (2-2-3 hours)

A course aimed at giving allied health scientists a working knowledge of the electronics used in various disciplines. Following a course in the basic principles of electronic measurement, various sub-courses can be pursued which would be appropriate for respiratory therapists, radiological technologists, physical therapists or laboratory technologists. Laboratory experience parallels the lecture material given.

HS 600. Introduction to Computers and Information Systems Technology in Health Care. (3-2-5 hours)

Basic introduction to the use of computers, systems analysis and information systems technology in health care delivery. Overview of current and future use of computers and related technology in supporting health

care delivery, with demonstrations of and practise in using local computer-based health systems.

HS 610. Departmental Health Systems Concepts. (3-0-3 or 3-2-5 hours)

A graduate level course in management problem solving, tailored on demand for presentation to specific student groups. Case problems in specific hospital departments are the vehicles for presentation of systematic problem solving techniques and approaches. Example techniques are: work standards, staffing methods and performance measures; scheduling work activities, departmental organization; monitoring and controlling quality; cost reduction methods.

HS 620. Introduction to Health Delivery Systems. (5-0-5 hours)

A study of the essential characteristics of current health delivery systems of this country, and comparisons with other health delivery systems. Included will be a review of financing, organization, legislation, controlling, problems, and trends. The purpose of this course is to help the student/health-care provider develop a basic understanding of our health delivery system from a broad-based perspective.

HS 630. Introduction to Biomedical Computing. (3-0-3 hours)

Introduction to computers and their use in analyzing biomedical data. Emphasis is on the logic of formulating algorithms for use on the computer and translating these into computer programs using the BASIC computer language. (Formerly STA 601.)

***HS 631. Advanced Techinques in Biomedical Computing I. (3-0-3 hours)**

Prerequisites: HS 630, STA 601 or equivalent

Introduction to FORTRAN language and advanced techniques for processing and analyzing biomedical data. Use of program packages for numerical and statistical analysis. Organization of large files and data banks. Students will be encouraged to learn these methods using research problems from their own professional areas.

***HS 632. Advanced Techniques in Biomedical Computing II. (3-0-3 hours)**

Use of small computers in biomedical research and clinical laboratories and ASSEMBLER language programming. Processing and analysis of biological signals, including smoothing, filtering and data reduction techniques. Students will be encouraged to learn these methods using research problems of their own choice.

HS 635. Computers in Education. (3-0-3 or 3-2-5 hours)

Introduction to use of computers in education, including computer-assisted instruction (CAI) and computer-managed instruction (CMI). Survey of general concepts, authoring systems and computer languages, computer terminals and systems, and currently available instruction modules. Practical experience in implementing an instructional routine of the student's choice.

HS 645. Health Information Systems. (3-0-3 hours)

Concepts and principles of health information systems, hospital information systems, with emphasis on flow of patient data throughout the hospital, systems for organizing and managing information flow, and use of computers in the information system and in specialized hospital service and patient care areas. A major purpose of this course is to make the students more discriminating and effective users of automated information systems by training them in the skills of defining problems and of developing specifications for information systems application.

HS 850. Biometry: Introductory Research Statistics. (3-2-5 hours)

General principles and methods of statistics as applied to biological research. Descriptive statistics, fundamental probability distributions, estimations and hypothesis testing, introduction to analysis of variance. (Formerly STA 801.)

HS 860. Application of Control Theory to Physiological Systems. (3-0-3 hours)

Prerequisites: PHY 701, 702, 703 or approval of instructor

The study of the techniques to mathematically describe a physiological process and aspects of control theory that are effective in the analysis of a system. Computer simulation of selected physiological systems.

HS 861. Electronics as Applied to Medicine. (2-4-3 hours)

The modern biological scientist is assisted in his work by a wide range of electronic instrumentation to the point where an understanding of instrumentation techniques is vital. Biomedical Engineering has developed a teaching system which consists of a course in basic electronics which is a prerequisite to sub-courses in electronics for cardiovascular studies and digital circuitry. Other sub-courses on electrophysiology, instrumentation for biochemistry, and laboratory computer applications are in preparation. Appropriate sub-courses can be taken by a student to match his particular field.

***HS 851. Biometry: Advanced Research Statistics I. (3-0-3 hours)**

Prerequisites: HS 850, STA 801 or equivalent

Regression and correlation analysis, curve-fitting, design of experiments, analysis of variance and analysis of frequency data.

***HS 852. Biometry: Advanced Research Statistics II. (3-0-3 hours)**

Prerequisites: HS 850, STA 801 or equivalent

Nonparametric statistical techniques and an introduction to multivariate analysis.

*Indicates courses approved for credit toward a Graduate Studies degree.

medicine

Dean—Dr. Fairfield Goodale
Associate Dean for Curriculum—Dr. Terrence T. Kuske
Associate Dean for Special Programs—Dr. Russell Moores
Associate Dean for Admission—Dr. Boyd Sisson
Associate Dean for Clinical Sciences—Dr. Joseph Bailey
Associate Dean for Basic Sciences—Dr. Thomas McDonald

School of Medicine

The physician occupies a vital and honored position in today's increasingly sophisticated and complex society. Successful completion of requirements in the School of Medicine leads to the M.D. degree and a career dedicated to the maintenance of health and the alleviation and cure of disease. Opportunities include clinical practice, teaching and work in research.

Accreditation

The School of Medicine is accredited by the Association of American Medical Colleges in conjunction with the American Medical Association.

Admission Requirements

Policy

Admission policies established by the Board of Regents of the University System of Georgia are the responsibility of the Admissions Committee, with consideration for the special requirements of the medical curriculum. The committee is responsible for the acceptance of all students entering the first, second or third year classes. Admission with advance standing to the fourth year class is not ordinarily possible.

The Admissions Committee selects those applicants who are more likely in its opinion to make the best students and physicians. Consideration is given to the totality of all credentials, including (1) the demonstrated level and pattern of academic ability and achievement, (2) scores on the new Medical College Admissions Test, (3) evaluations supplied by premedical advisors or advisory committees, and (4) assessment by means of two personal references and interviews with Medical College personnel of the less tangible qualities of personality, character, maturity, emotional fitness, motivation, and potential for meeting Georgia's health care needs. Each student is considered on the basis of his individual qualifications without regard to race, sex, creed, or national origin.

Only a very limited number of positions are available for out-of-state applicants; therefore, in order to be given serious consideration, nonresidents must present superior qualifications and preference is given to those who have a significant Georgia connection. No age limit for applicants is defined, but older applicants must have been engaged in recent academic activities and must have demonstrated exceptional motivation and academic achievement.

Academic Requirements

At least three years of work in an approved college.

The minimum requirement is 90 semester hours or 135 quarter hours. The three-year college course, in both quality and quantity, must be acceptable as the equivalent of the first three years leading to the degree of Bachelor of Science in Arts in an approved college of arts and sciences. Preference is given to applicants who will have completed their baccalaureate degree.

An applicant may major in the discipline of his choice; however, he must complete the following:

Biology

One academic year of general biology or zoology (with laboratory).

Chemistry

(a) One academic year of general inorganic chemistry (with laboratory). Inclusion of quantitative chemistry is recommended.

(b) One academic year of advanced chemistry, two quarters or one semester of which must be organic chemistry with laboratory. The other quarter or semester may be fulfilled by any advanced chemistry course (laboratory not necessary).

Physics

The number of academic terms of Physics (with laboratory) necessary to cover mechanics, heat, light, sound, electricity and magnetism.

English

One academic year of English or whatever portion of the academic year is required for the baccalaureate degree in an accredited college or university.

Note: One academic year equals three quarters, two semesters, or one semester and two quarters.

Premedical Electives

An understanding of man, contributory to the wise and solid practice of medicine, can be derived from many disciplines. Students are encouraged to pursue in-depth study in disciplines which are of real interest to them, in addition to the required courses. The selection of the areas for in-depth study is not of primary concern to the committee; many students select natural science as a primary emphasis and others select physical sciences or the humanities. Elective

courses may be used to broaden the background of students applying to medical school.

Medical College Admission Test (MCAT)

Every applicant must take the Medical College Admission Test, preferably in the spring preceding the submission of his application but no later than the fall. The test is given twice yearly at most senior colleges. Beginning with the fall of 1978, all applicants must take the new MCAT. Information concerning it may be obtained from the premedical advisor or from the Medical College Admission Test, The American College Testing Program, P.O. Box 168, Iowa City, Iowa 52240.

Health Report

A satisfactory health report must be submitted to the Office of Student Affairs.

Personal Interviews

Interviews with members ot the Medical College faculty are held by invitation of the Admissions Committee after review of the completed application. Such interviews are ordinarily required prior to acceptance.

References

An evaluation of the applicant is required from two persons, one of whom should be an individual active in one of the health professions.

In addition, an evaluation from the applicant's premedical advisor is required. Recommendations from other sources are discouraged.

Application Procedure

The School of Medicine participates in the American Medical College Application Service (AMCAS), which means that application forms are issued by AMCAS upon receipt of an application request card from the applicant. The request cards can be obtained from the Office of Student Affairs, Medical College of Georgia, or from premedical advisors on most college campuses. The MCG deadline for filing applications (postmarked) with AMCAS for the entering class of September is the previous December. Early application is urged by the Admissions Committee. No application fee in addition to the AMCAS fee is required.

Irregular Students

Faculty members holding doctorates in basic medical or biological sciences who wish to qualify for careers in full-time academic or clinical research may enroll as irregular students in special instances.

Requirements for admission as an irregular student are available from the associate dean for admissions. Before final acceptance as an irregular student, applicants must obtain approval from the dean of the School of Medicine for the proposed course of study.

The college assumes no responsibility for future curriculum changes which might alter such programs.

Admission with Advanced Standing

Applicants in good standing in accredited two or four year medical schools will be considered for admission to the appropriate advanced level of the curriculum when student space permits. The School of Medicine also participates in COTRANS on a space available basis. Details should be obtained from the Office of Student Affairs.

Financial Aid

An application form on which to apply for any assistance program administered by the college may be secured by writing the college's Financial Aid Office.

Curriculum

During the first year (Phase I) the students study the structure and function of the human body through courses in anatomy, histology, embryology, cell and molecular biology, neurosciences, and physiology. Courses in humanities and behavioral sciences relate to the social, ethical and behavioral aspects of the individual. Microbiology is also included in the first year curriculum. Contact with patients begins with physical diagnosis during the winter quarter of the first year.

The second year (Phase II) points toward clinical medicine with courses in pathology and pharmacology, genetics, preventive medicine and public health, and laboratory medicine. Lectures in the "clinical sciences" provide the didactic basis for the major clinical blocks during the clinical years. Courses in radiology, anesthesiology, neurology and psychiatry are also given during the spring quarter. Interdepartmental cooperation and clinical relevance are stressed throughout the first two years.

In addition to the "core curriculum" two

afternoons a week are assigned for electives during part of both the first and second years.

During Phase III of the curriculum, the student is required to take 72 weeks of clerkships including five basic clerkships to provide adequate fundamental clinical grouping. The Department of Medicine is responsible for the 12-week medical clerkship. The eight week surgical clerkship is taught by the Department of Surgery, including the subspecialty divisions and the Department of Anesthesiology. In addition, a six week clerkship is taught by the Department of Obstetrics and Gynecology, a six week clerkship by Pediatrics and a four week clerkship by the Department of Psychiatry.

The balance of the third and fourth years is filled by elective courses which can be advanced in the various clinical departments, including medicine, surgery, obstetrics and gynecology, psychiatry, neurology, pediatrics, dermatology, radiology, anesthesiology, ophthalmology and family practice, as well as electives in basic sciences. Research electives are available. Electives may also be taken in other institutions and community hospitals upon approval by the appropriate department of the School of Medicine and the faculty Curriculum Committee.

The biological sciences and clinical sciences are taught by various departments of the School of Medicine.

Close affiliation agreements have been developed with major community hospitals in the State of Georgia. Part of the clinical core curriculum may be taken at one of these hospitals.

Phase I

First Quarter (14 Weeks)		Credit Hours
CMB 550	Cell and Molecular Biology	16
ANM 552	Embryology	4
ANM 550	Gross Anatomy	6
ANM 553	Histology	7
HUM 550	Medical Humanities	3
	Total	36

Second Quarter (10 Weeks)		
ITD 560	Approach to Physical Diagnosis	5
ANM 550	Gross Anatomy	5
CMB 570	Microbiology	10
PHY 550	Physiology	8
	Total	28

Third Quarter (11 Weeks)		Credit Hours
PSY 550	Behavioral Sciences	2
	Electives	"Credit" Only
CMB 571	Microbiology	4
ITD 550	Neurosciences I	11
PHY 551	Physiology	9
	Total	26

Phase II

First Quarter (15 Weeks)		Credit Hours
ITD 530	Endocrinology	7
ITD 540	Introduction to Clinical Medicine	3
PTH 560	Laboratory Medicine	8
PTH 550	Pathology	8
PHM 551	Pharmacology	4
	Total	30

Second Quarter (10 Weeks)		
END 550	Genetics	2
ITD 575	Infectious Diseases	4
ITD 541	Introduction to Clinical Medicine	3
PTH 551	Pathology	5
PHM 552	Pharmacology	5
RAD 550	Radiology	1
MED 550	Reticulo Endothelial System	3
	Total	23

Third Quarter (10 Weeks)		
ANS 550	Anesthesiology	1
	Electives	"Credit" Only
ITD 555	Neurosciences II	6
ITD 565	National Board Review	No Credit
OPH 550	Ophthalmology	1
PHM 553	Pharmacology	4
ITD 570	Physical Diagnosis	3
FMP 550	Preventive Medicine and Public Health	3
PSY 560	Psychiatry	7
	Total	25

Requirements for Phase III

A. General Requirements

1. The minimum requirement in Phase III for graduation from the School of Medicine, Medical College of Georgia, is the satisfactory completion of 18 months work. Students are encouraged to pursue courses of study in excess of the minimum requirements.

2. Students must have satisfactorily completed all of the requirements of Phase II before entering Phase III.

B. Required Clerkships (First Year—Phase III)
1. Medicine 500
3 months basic clerkship
2. Obstetrics and Gynecology 500
1½ months basic clerkship
3. Pediatrics 500
1½ months basic clerkship
4. Psychiatry 500
1 month basic clerkship
5. Surgery 500
2 months basic clerkship

C. Electives
In addition to nine months of basic clerkships, a minimum of nine months elective experience constitutes the requirements for Phase III. Of these nine months, the maximum time which may be scheduled for off-campus electives is four months during Phase III.

Curriculum Bulletin

The courses offered are not limited to those listed in the catalog, and new courses are frequently introduced into the curriculum. It is possible that some of the courses listed may be withdrawn from the curriculum with the approval of the Curriculum Committee and the dean of the School of Medicine. Course descriptions can be found in the Phase III Curriculum Bulletin, a copy of which may be obtained by writing to the Curriculum Office, School of Medicine.

Scholarship and Promotion

Promotion of students from one year to the next is dependent upon the satisfactory completion of each year's work. Promotions are considered on the basis of recommendations by individual instructors, on department evaluations and on students' total records, including performance on Parts I and II of The National Board Examinations.

The faculty has the obligation and right to determine the methods of evaluation by performance or by examination and to evaluate each student individually. Comprehensive oral examinations may be scheduled at the end of the second and fourth years on the advice of the Promotion Board.

Classification of Students

In the School of Medicine, students are classified as first year, second year, third year or fourth year.

Criteria for Promotion and Graduation

The material presented here is an abstract of the material described in full detail in the publication entitled Promotion and Graduation, Policies and Procedures, Handbook for Students and Faculty. A copy of this is provided to each student and faculty member.

I. Required Courses

A. In order to be promoted or graduated, a student must have a grade of C or better in every required course. See following section for interpretation of grades, A, B, C, D and F.

B. A grade of D in any required course necessitates satisfactory completion of remedial work within a specified time to raise the grade to a passing grade, such work to be determined by department giving the grade.

C. In Phases I and II, if a student has grades of less than C in as much as 25% of the year's work or F in 10%, the Promotions Committee will decide whether,
(1) remedial work is possible
(2) to recommend the student repeat all or part of the year's work
(3) to recommend the student be dismissed from school.
The percentage of the academic year's work will be determined by the registrar's office based on a curriculum inventory of the total number of hours.

In Phase III, in the case of a required clerkship where it is possible to repeat the course without repeating the entire year, an F must be removed by repeating the clerkship (even if less than 10% of year's work).

II. Electives

At the end of Phases I, II and III, a student must have a grade of C or better in each elective course taken to satisfy the prescribed number of elective hours required for the phase in which the student was enrolled. A grade recorded as "pass" is equivalent to a C or better. If a student receives a grade of D or F or "fail" in an elective and does

not either repeat the elective or do remedial work to raise the grade, the student will receive no credit for the elective. The student will have to take additional electives and pass them with a grade of at least C or "pass" in order to satisfy the prescribed number of elective hours.

For graduation a student must have a cumulative (or total) elective average for Phases I, II and III of C or better based on all elective grades (both passing and failing grades). The total elective average is an internal calculation and does not become part of the students permanent record. Calculation of a total elective grade for Phases I, II and III before graduation will only be necessary for students with elective grades of D or F on their record.

III. Requirements on National Board Examination, Parts I and II

A student must satisfy requirements for the National Board Examination, Parts I and II, for A and B listed below:

A. Promotion from Phase II to Phase III—Part I
B. Graduation—Part II

Interpretation of Grades

A — Outstanding
Superior performance.

B — Good
Commendable performance, work of good quality.

C — Satisfactory
Acceptable performance, a definitely passing grade with no reservations.

D — Marginal
A grade that indicates this student has not met the minimal performance in this area and that additional experience and demonstration of learning will be required if this subject is specifically required for graduation. No credit.

F — Not passing
Failing and unsatisfactory work.

OTHER PROGRAMS AND ADMINISTRATIVE PROCEDURES

Student Responsibilities & Judicial Procedures

Student discipline at the college is the responsibility of the president and his administrative staff. Students will be liable for disciplinary action should they fail to act in a manner of credit to themselves, the college and the medical profession.

Honor System

Every medical student is expected to maintain a high degree of personal integrity and honor, not only during his years on the campus, but also throughout his practice as a physician. In recognition of this obligation, each student is expected to subscribe to an honor code established by the students of previous years. The Honor Court is composed of twelve regularly enrolled students, with four members from each of the fourth, third, and second year classes. A copy of the Honor Code is distributed to freshmen during orientation.

Student Affairs Committee

The Student Affairs Committee of the School of Medicine acts as an advisory committee to the dean in student and faculty relations. The committee consists of the chairman, nominated and appointed in accordance with the policies for general faculty committees; one faculty member elected by the students from each of the four classes; associate dean for curriculum, ex officio and; director of student affairs, ex officio. Student members include the president of each class, the president of the Student American Medical Association and the School of Medicine representative to Organization of Student Representatives of the AAMC.

Alpha Omega Alpha

A chapter of this honorary scholastic fraternity in medicine was established at the college in 1926. Each year students of the third and fourth year classes are nominated on the basis of both peer and faculty recommendations and academic excellence. Elections are held by active members of the chapter.

Special Programs

Guest Lecturers

Throughout the year, distinguished physicians and scientists from other schools and from overseas visit the various departments of the Medical College of Georgia and participate in departmental teaching programs.

Distinguished lecturers address the whole school each year.

In addition, the following special lectureships are held: (1) The Aaron Brown Memorial Lecture, sponsored by Phi Delta Epsilon Fraternity; (2) The Alpha Omega Alpha Honor Fraternity sponsors two lectures annually (Student Honors Day occurs with the spring lecture); (3) The Sydenstricker Lecture, in honor of the late Dr. Virgil P. Sydenstricker, a distinguished member of the faculty for many years, sponsored by the Student American Medical Association.

Research Fellowships

The Medical College of Georgia has a limited number of summer research fellowships in which students work closely with faculty investigators on specific problems.

This is an elective, but an important component of the students' educational experience, allowing them to participate in research and to develop an understanding of the methods, philosophies and problems involved.

Interested students should contact departments directly.

Affiliated Hospitals Program

The School of Medicine has developed a number of affiliations with community hospitals around the State of Georgia. These affiliations are aimed primarily at widening the educational experiences of our students by providing them with educational opportunities in general medicine and in the specialty fields at the affiliated community hospitals. By participating in these training programs the students will gain experience, insight, and perspective into the practice of high quality medical care as it exists in private practice and in these community hospitals.

The required clerkships in clinical medicine are organized to make optimal use of the clinical facilities in the Augusta area. These clerkships accordingly are situated in the teaching hospital, the University Hospital (city-county hospital), the Veteran's Administration Hospital and the Georgia Regional Hospital.

Elective programs in community hospitals and the family practice preceptorships are available to students who have completed the nine months of required clerkships in the Phase III Curriculum. A total of four months of elective training may be spent in community hospitals or off-campus preceptorships. Electives are available in Savannah at the Memorial Medical Center; in Columbus at the Medical Center; the Medical Center of Central Georgia in Macon; and the county hospitals located throughout the state. In Augusta, electives are available at the University Hospital, at the Dwight David Eisenhower Memorial Medical Center, and the Veteran's Hospitals.

Postdoctoral Training Programs

The college has internship and residency programs which have been approved by the Council on Medical Education and Hospitals of the American Medical Association. The teaching hospital of the college, Talmadge Memorial Hospital, is the parent hospital for these programs, but integration and/or affiliation with the University Hospital, Augusta; the Veteran's Administration Hospitals, Augusta; Memorial Hospital, Savannah; Georgia Regional Hospital, Augusta, and the Medical Center of Central Georgia, Macon, may be included. A brief outline of the various training programs is given below. Applicants seeking residency training may apply either to the department chairman or to the director of Hospital and Clinics.

Internships

Internal Medicine

Twelve straight medical internships are available which are designed as the first post-graduate year of training toward Board certification in internal medicine. Interns rotate through the Talmadge Memorial Hospital which is a subspecialty referral hospital, the University Hospital which serves the local indigent patient population, and the Veteran's Administration Hospital. Thus the intern has a broad experience in the management of a variety of diseases in different patient populations. An important responsibility of the intern is his or her role in the teaching of medical students and other paramedical personnel. This responsibility along with the responsibilities for patient care prepare the intern for advanced scholarship in the clinical skills of diagnosis and management of those diseases falling within the realm of internal medicine.

Obstetrics and Gynecology

The description of this internship has been changed as follows:

Five internships are offered by the department of Obstetrics and Gynecology. These constitute the first year of our four-year program leading to

Board eligibility in obstetrics and gynecology. The intern spends six months on obstetrics and gynecology, four months on medicine, one month in the emergency room and one month in the neonatal intensive care nursery.

Pathology

The straight internship in pathology is offered to recent graduates whether or not they have decided about later training. The intern's experience is like that of a first-year resident. His study of human disease is excellent preparation for any clinical field. If he decides to continue in pathology, it is a year saved that can be spent later in special research training. An elective in one of the clinical disciplines may be arranged. The internship program is in the Medical College teaching hospital and may include elected periods in the Medical College affiliated University Hospital.

Pediatrics

Six straight pediatric internships are available. The year is spent on the pediatric inpatient and newborn services at Talmadge Hospital and in the outpatient clinics and emergency room of University Hospital.

Surgery

Ten straight internships in surgery are offered. These ten internships in the General Surgery "core" rotations include positions for those graduate trainees who have career goals in the specialties of thoracic surgery, neurosurgery, orthopedic surgery, plastic surgery, urology and otolaryngology as well as in general surgery.

The "core" program is based on a philosophy that surgery is a "discipline of medicine" and that surgeons should be "internists who operate."

Rotations include general surgery, emergency medicine, acute cardiology, respiratory care, and elective time in a broad spectrum of disciplines.

Flexible Internships

The flexible internship is primarily intended for those individuals who have not decided upon a residency program or whose training needs are not best provided by a single departmental program. It allows maximum latitude of choice in the content of the first post-graduate year of training since the only specific requirements are four months of internal medicine and one month of emergency room. Such latitude will require special counseling for each applicant to ensure that the program selected best suits his long range plans. As such, the flexible internship fulfills requirements for Georgia State Licensure and will allow adequate preparation for entry into any of the residency programs of the Medical College.

Residencies

Anesthesiology

In conformance with the continuum in anesthesiology specialty training as promulgated by the AMA and the ABA, this department offers two programs for specialty training in anesthesiology.

1. a. A basic year of training with rotations on other specialties and subspecialties such as medicine, pediatrics, emergency room, cardiology, etc.
   b. Two years of clinical anesthesiology. This time would be spent in the O.R., respiratory therapy, intensive care, obstetrics, etc., covering the usual range of clinical anesthesiological experience.

For the M.D. coming directly from medical school into anesthesiology, the (a) and (b) mix can be arranged in any fashion to fit the needs and desires of the candidate and departmental chairman. That is, six months of (a), followed by two years of (b), and finally six months of (a), or any other combination could be followed.

For the M.D. coming into anesthesiology from practice or other areas of medicine, the (a) requirements could be satisfied by one year of satisfactory rotation in other specialties prior to admittance into the anesthesiology program.

2. A four year program consisting of (a) and (b) above plus (c), one year of optional training in an area of research, in clinical anesthesia that is more advanced and specialized than the usual experience gained during the 24 months of clinical anesthesia, or in a basic science or a clinical discipline other than anesthesiology.

Dermatology

The residency training program in dermatology is for three years with emphasis on both clinical and basic scientific aspects of cutaneous medicine. Patients are seen in outpatient clinics at the Talmadge, University, and Veteran's Administration Hospitals. There are ten inpatient beds at the Talmadge Hospital and beds are available at the V.A. Hospital on a "need basis." Training is graduated, with increased responsibility in the care of patients accruing throughout the program. Regular weekly conferences include dermatology

grand rounds, histopathology conference, basic science seminar, journal club and didactic conferences. In order to develop the critical capacity necessary to evaluate advances in dermatology, residents rotate through the research laboratories for periods of two to twelve months full-time during their training and are required to complete a clinical or laboratory research project during the three year training period.

Family Practice

The Department of Family Practice in the School of Medicine was established July of 1972. Resident and student training programs became operational July of 1973.

Objectives of this department are: (1) to educate and train physicians in the specialty of family medicine; (2) to equip them with the knowledge and skills necessary to provide high quality, continuous, comprehensive, personalized care to individual family members and to the family unit as a whole; (3) to orient training not only to the care of the ill but also in health maintenance and disease prevention; (4) to function as a leader of the health team which focuses on the family as the basic unit of society, emphasizing continuous, comprehensive care; (5) to emphasize the recognition and understanding of sociobehavior problems in health and disease in the context of the family unit; (6) to stimulate the interest and involvement in clinical research evaluation and peer review of the medical care process, and a search for improved methods of health care delivery; (7) to emphasize the importance of continuing education for all physicians.

Training is centered in and around the Family Practice Center (Model Family Practitioner's Office). Here medical students, physician's assistant students, nursing students, residents in family practice and others participate in delivery of health care to families and their individual members.

As they progress through their three years of training, residents in family medicine spend an increasing portion of their time in the Family Practice Center, increasing the number of families under their care. Associated with this training they receive specific training in internal medicine, pediatrics, surgery, obstetrics and gynecology, psychiatry, dermatology, surgery, orthopedics, emergency room care and other specialties and subspecialties.

Internal Medicine

A complete post-graduate training program in internal medicine and its subspecialties is offered; all of the training required for qualification for the American Board of Internal Medicine and each of the Subspecialty Boards can be obtained. The internship and residency program is integrated with the University Hospital and the Veteran's Administration Hospital. Fellowships are available in cardiology, cardiovascular research, hematology, infectious diseases, endocrinology and metabolism, gastroenterology, renal diseases, rheumatology, pulmonary disease, clinical nutrition and medical oncology. Teaching rounds and conferences are held daily for house officers and students.

Neurology

A fully approved three year residency in neurology combines the facilities of Talmadge, University and Augusta VA hospitals. The first year is spent on the wards and in the clinics, with a rotation on neurosurgery. The second year consists of pediatric neurology, and rotations of neuroradiology and neuropathology. The final year as a senior resident offers a wide choice of electives, including opportunities in neuropsychology, neurophysiology, neurochemistry, EEG, EMG, etc. The resident may participate in the community outreach programs sponsored by the Department of Neurology.

The goal of the neurology residency program is to train clinically competent neurologists who will be equipped to make an original contribution to the knowledge of the nervous system, in either an academic setting or in clinical practice. Three residents are accepted each year.

A training program in pediatric neurology is offered under the joint auspices of pediatrics and neurology, and supervised by three full-time faculty members of the section of pediatric neurology. Two types of programs are offered: one year of fellowship (PL3) or a 5 year program (including internship) combining pediatric, adult neurology and pediatric neurology training which meets the specialty board requirements.

Obstetrics and Gynecology

A parallel four-year residency program leading to Board eligibility is offered. The first year is described under Internships and during the subsequent three years, in addition to general obstetrics and gynecology, the resident gains experience in reproductive endocrinology, maternal-fetal medicine, gynecologic-oncology, family planning, gyn-surgical pathology and obstetrical anesthesia. The program utilizes both Talmadge and University Hospitals. The residency is academically oriented and house staff participate in student teaching and research.

Ophthalmology

A three year residency program in ophthalmology is offered with training at the teaching hospital with rotations at University Hospital and the Veteran's Administration Hospital. Training in all types of ophthalmic surgery is included. A basic science course in ophthalmology is part of the residency program.

Pathology

The training program offers one year of internship and up to five years of residency. The resident physician participates in the student teaching program, in the department's autopsy, surgical pathological and clinical pathological services; periods of part-time or full-time research are available to those who want them. Places are available to persons preparing for academic pathology or the practice of pathology, and to those who may desire a year or more of training in pathology in preparation for another discipline. Individualized programs that satisfy Board requirements and the individual's career goals are arranged in the Medical College teaching hospital and may include elected periods in the Medical College affiliated University Hospital.

Pediatrics

The pediatric residency is of two years duration and together with the internship forms a coordinated three year program which fulfills the requirements for Board eligibility. Additional training is available in many of the subspecialty areas of pediatrics.

Psychiatry

The department has a fully approved three year residency program in psychiatry. In addition, the department offers Categorical first post graduate year training in cooperation with the Departments of Family Practice, Medicine and Pediatrics. Detailed information about the program may be obtained on request.

Diagnostic Radiology

A four year residency in general diagnostic radiology is offered. The first year may be spent in a flexible program or as a straight first year residency of another program. Three years are spent with four month rotations in neuroradiology, nuclear medicine, special procedures, pediatric radiology and 20 months in general diagnostic radiology. Emphasis is on progressive independence of the resident as his foundation is strengthened. There are 50,000 exams per year in the present facility of all varieties. During 1975, an outpatient section was opened.

Radiation Oncology

A four year approved residency program is available. The first year is spent in a flexible first year program or a straight program of another specialty. During the three years experience is gained in treatment planning, the basic physics of radiation oncology, its radiobiological effects and the use of various modalities of treatment as it relates to the general problem of oncology. The use of apparatus of different energies is utilized in the program. An area radiation therapy program greatly strengthens the variety of patients treated. Eight hundred new patients are treated each year.

General Surgery

This is an integrated program which includes rotations through Talmadge Hospital (referred surgery), University Hospital (trauma and referred) and the Veteran's Administration Hospital. The program is four or five years in length following the internship. The length of the five year time tract is designed for those who wish to pursue a career in academic surgery and requires a year of research experience. Laboratory experience is not required in the four year program.

Five residents are trained at each level beyond the internship. The program is not pyramidal. Competent performance is essential for reappointment. The program is based on a philosophy that surgery is a discipline of medicine and that surgeons are "internists who operate." Anatomy, physiology, and biochemistry and the correlation of basic science in clinical problems is constantly stressed in a wide variety of daily rounds, teaching conferences and in grand rounds.

Neurosurgery

This is a five year training program with a prerequisite of one year internship of choice and one year general surgery or one straight surgical internship. Five residents are accepted. Training includes clinical neurosurgery and microsurgery supplemented by on-service participation in neuroradiology and weekly conferences in neuropathology and off-service experiences in clinical neurology and combined neuroanatomy and neurophysiology as well as basic research. The teaching hospital, the University and Veteran's Administration Hospitals participate in the training program. By special arrangement, the residents may receive graduate school credit while actively pursuing the neurosurgical residency.

Orthopedic Surgery

The orthopedic program is a four year program which includes a period in the first year in general surgery. Experience and increasing responsibility is

provided in the program in the basic science of orthopedics, fractures, children's and adult orthopedics, and reconstructive surgery. Affiliation with the Veteran's and University Hospitals is included. Long-term observation and comprehensive care are emphasized. Three residents are appointed each year.

Otolaryngology

The Division of Otolaryngology offers an approved residency training program. A prerequisite of one year post-graduate surgical training is required. The actual otolaryngology training is three years in duration and the rotations include the Talmadge Memorial Hospital, Veteran's Administration, and University Hospital. Emphasis is placed on a broad background to include a basic science course and adequate clinical exposure to otology, bronchoesophagology, maxillofacial trauma, and head and neck surgery.

Plastic and Reconstructive Surgery

The overall program is planned to comprise two and one-half years including a six-month Hand Fellowship in Louisville, Kentucky with Dr. Harold Kleinert. Qualifications for residency include completion of three years of general surgical training or the equivalent, high moral and ethical standards and the recommendation from previous training programs.

The primary objective of the Division of Plastic and Reconstructive Surgery is to provide quality instruction and clinical material for general plastic surgical training. This broad-based program will be structured to offer didactic and clinical application in the basic understanding of wound healing, tissue transplantation, metabolic and genetic alteration and specific surgical techniques during the early phase of training with graded clinical responsibility in the latter years. Specific areas of interest will include the cleft lip-palate, craniofacial anomalies, diagnosis and management of congenital hand anomalies and hand injuries, acute burn therapy and reconstruction, ablation of head and neck tumors and reconstruction, and cosmetic surgery.

Rotation schedules will begin at Talmadge Hospital for six months and follow for the second six month period at University Hospital or at the Veteran's Hospital. The second year of training will begin with a six month Hand Fellowship in Louisville, Kentucky, under the direction of Dr. Harold Kleinert. This program provides one of the most inclusive exposures to hand surgery available. The chief year is one of application of principles, both in the operating room and in primary patient responsibility. The final six months will be spent at Talmadge Hospital.

Thoracic Surgery

This is a two or three year program. Prerequisites include internship and four years of general surgery residency (with chief residency) training primarily in the teaching hospital with rotations through Memorial Hospital, Savannah, Ga., and Veteran's Administration Hospital, Augusta. Four residents are accepted.

Urology

A three year program is offered with prerequisites of one year internship and one year in a field basic to urology (usually a year in general surgery). It is served in the teaching hospital and at the Veteran's Administration Hospital. Six residents are accepted.

Continuing Medical Education

The objective of continuing education is to preserve and increase professional knowledge and competence throughout the entire career of professional health workers. The program of Continuing Medical Education in close cooperation with the departments in the School of Medicine and with the Division of Continuing Education has the responsibility for developing and presenting educational activities to assist professional health workers in maintenance and further development of their skills.

Types of Courses

1. Campus Symposia
   Numerous courses lasting from one to five days are presented each year.
2. Physician's Continuing Education Series
   In several cities throughout Georgia a series of one day medical symposia are presented each year.
3. Intermittent Courses
   Each session of these courses usually last a few hours, and sessions are held at specified times over a period of months.
4. Special Technique Workshops
   Workshops in laboratory, diagnostic and therapeutic procedures offer enrollees an opportunity to obtain practical experience.
5. Clinical Traineeships
   Experience in wards or laboratories for periods of one week or longer is offered by special

arrangement with the chairman of the department concerned and the Division of Continuing Education.

Program Announcements

Prior to each course, brochures describing the topics, faculty, meeting place, time, and registration fees are mailed to the group for whom the course was developed.

Credits

Instruction presented in this program is not designed to give credit toward specialty qualification or academic degrees. However, a record of attendance is maintained for the benefit of those individuals who attend these courses, and continuing education units (C.E.U.'s) are awarded for most courses.

The program of Continuing Medical Education is accredited by the Council on Medical Education of the American Medical Association, and physician's attendance at most courses is acceptable for credit toward the Physician's Recognition Award of the American Medical Association.

Attention is given to the requirements of the American Academy of Family Practice, and attendance at most courses is accepted for credit by the Academy.

Fees

The enrollment fees for continuing education courses are listed separately for each course and are based on guest faculty participation, hours of instruction, and equipment required.

Residents, interns, medical students, and college faculty may attend most courses without fees. Certain courses are restricted and have limited enrollment.

Course Descriptions

Interdepartmental

ITD 501. Clinical Endocrinology and Reproduction.

This two-month elective will be an interdepartmental and interdisciplinary elective program with the participation of the Departments of Endocrinology, Medicine and Obstetrics and Gynecology.

The entire group of students will have presentation and review of essential core material for one to two hours, three times a week. This will include appropriate case presentations and participation in interdepartmental endocrine rounds.

ITD 502. Basic Clerkship in Pediatric Neurology.

The student will be exposed to common pediatric neurological problems which include the differential diagnosis of CNS metabolic disorders, mental retardation, birth defects, learning disorders and neuro-muscular problems. The student will manage patients admitted to the Pediatric Neurology Service at Talmadge Memorial Hospital, answer consultation requests from other services and attend Pediatric Neurology clinics. Regular daily bedside teaching rounds will be held as well as scheduled preceptor-student sessions with a full-time faculty member. There is also considerable flexibility in the program depending on the student's past experience.

ITD 503. Advanced Clerkship in Pediatric Neurology.
ITD 504. Advanced Clerkship in Pediatric Neurology.

The activities in this elective are similar to those in the Basic Clerkship in Pediatric Neurology except that there is more flexibility and more opportunity for an in-depth experience in Pediatric Neurology. Whereas ITD 502 is located at Talmadge Memorial Hospital only, the advanced clerkships will offer considerable experience at the University and Gracewood Hospitals as well as considerable opportunity for clinical and basic library research.

ITD 530. Endocrinology, Reproduction and Population. **(4-2-6 hours)**

The course provides the student the basic anatomy, biochemistry and physiology of the endocrine glands at a level that reinforces the introduction in Phase I and correlates the basic science principles in normal human physiology and endocrine diseases. After an introduction to the endocrine systems the course covers normal and abnormal development of secondary sex characteristics and puberty in the male and female, conception, contraception, pregnancy, labor, delivery and the neonate in utero and shortly after birth. The course then moves on to world population dynamics and that of the United States and current and future approaches to population control. Departments of Medicine and Endocrinology participate.

ITD 550. Neuroscience. **(7-4-9 hours)**

Prerequisite: First year standing in School of Medicine

An integrated course covering the structure and function of the human nervous system, including an introduction to clinical applications. The departments of Anatomy, Cell and Molecular Biology, Neurology, Physiology, and the Division of Neurosurgery participate.

ITD 540. Introduction to Clinical Medicine.

This course is designed to introduce the student to selected topics in medicine, pediatrics, surgery, obstetrics and gynecology. Emphasis is placed relating pathophysiological and biochemical abnormalities of disease processes to the clinical signs and symptoms of the disease.

ITD 560. Physical Diagnosis (Phase I)

This course imparts to the first year medical student the skills for performing a routine physical examination. It then enables the student to apply these skills in a patient contact experience. The course also allows the first year student to inter-relate with medical students who are in their clinical years, thereby providing a very relevant introduction to the clinical setting.

ITD 570. Physical Diagnosis (Phase II)
Conducted in the hospital setting with students assigned in small groups to individual faculty members, this course prepares the student for the clerkships of the clinical phase of medical school. It does so by amplifying the physical examination skills acquired in the Phase I Physical Diagnosis course and directs these skills toward the detection of abnormal findings. Moreover, the course emphasizes the skills of patient interviewing and history-taking.

ITD 575. Infectious Diseases.
This course is designed to compliment the Freshman Microbiology course, and is presented mainly by the Departments of Medicine and Pediatrics with assistance by Dermatology, Urology and Orthopedics as well. Infections are discussed by a systems approach, with emphasis on prevention, host-parasite interactions, diagnosis and management. The course consists of both lecture and case-laboratory presentations.

Anatomy

D. Bockman, Chairperson; G. Colborn; T. Gale; R. Holt; J. Horner; T. McDonald; J. McKenzie; P. Moore; W. Paull; T. Rosenquist; G. Sohal; T. Weidman; D. Welter.

ANM 310. Survey of Human Anatomy. (5-0-5 hours) (Fall)
The elements of human gross, histological, and developmental anatomy with an introduction to the anatomy of the major organ systems of the body.

ANM 330. Basic Gross Anatomy. (3-8-7 hours) (Fall)
This is an in-depth study of the structures of the human body. The laboratory exercise consists of dissection of the human cadaver, study of models, and examination of X-rays.

ANM 331. Basic Neuroanatomy. (3-6-6 hours) (Winter)
This is an in-depth study of central nervous system structures and the components of peripheral nerves. The laboratory exercise consists of dissection of the human brain and spinal cord, the use of Kodachrome slides of nervous structures, and mounted sections of brain tissue.

ANM 550. Medical Gross Anatomy. (4-12-10 hours) (Fall and Winter)
A lecture and laboratory course which includes dissection of the human body.

ANM 552. Medical Embryology. (3-0-3 hours) (Fall)
A study of the fundamental principles of mammalian embryonic development. Subject matter includes germ cell formation, fertilization, implantation, placentation, and morphogenesis of the various organ systems.

ANM 553. Medical Histology. (2-6-5 hours) (Fall)
A study of the cells, tissues, and organs of man as related to their function.

ITD 550. Neuroscience. (6-6-9 hours)
See course description under Interdepartmental Courses.

Additional courses are listed under the School of Graduate Studies.

Anesthesiology

Z. Gramling, Chairman; J. Custy; M. DeVore; S. Fadel; W. Freeman; M. Laslie; H. Osborne; M. Ruiz; J. Williams.

ANS 501. Anesthesiology Four Week Clerkship.
Basic elective which includes pre- and post-anesthetic evaluation; follow-up and management of patients during anesthesia and also in the recovery room; shock—its recognition and management; fundamental considerations and application of cardiovascular resuscitation using a mannequin; inhalation therapy; diagnostic and therapeutic blocks; the use of regional anesthetic drugs; CNS drug overdosage—recognition and management; technical experience in venipuncturing; patient monitoring, endotrachael intubation; fluid and electrolyte management; narcotics and analgesics; and the use of sedatives and hypnotics.

ANS 502. Anesthesiology Research Fellowship. (Special Elective)
Students have an opportunity to gain clinical research experience in the areas of potent analgesics as applied to postoperative pain; blood gas studies in ventilatory and respiratory problems as related to actual anesthesia or in the post-anesthetic period.

ANS 503. Anesthesiology Two Month Clerkship. (Special Elective)
Closely supervised clinical experience in the administration of anesthesia, including spinal, epidural, specific nerve block and field block, depending on the availability of material. The mechanism of endotracheal intubation will be stressed. The experience will be similar to that of a resident just beginning training in anesthesiology. The student will attend all scheduled teaching seminars and conferences.

ANS 504. Anesthesiology Preceptorship. (Special Elective)
ANS 504A. Anesthesiology Preceptorship. (Special Elective)
Clinical experience in anesthesiology in an off-campus hospital approved by the American Society of Anesthesiologists.

ANS 505. Respiratory Therapy Elective.
Introduction to both theoretical and technical aspects of respiratory therapy, with emphasis on basic physiology as related to the patient's problems and in solving these problems. Ventilators, IPPB, oxygen and aerosol therapy, blood gas interpretation, and pulmonary function studies are among the topics to be covered. In addition to lectures, selected patients will be used to demonstrate actual practical therapeutic aspects of respiratory therapy.

ANS 506. Obstetrics Anesthesia Elective.
Four weeks in obstetrical anesthesia to gain experience in the use of epidural, spinal and other analgesics in the pain relief of labor and delivery. Effect of local anesthetics on labor pain contractions and on fetal heart rate, reading of fetal monitors, and also infant resuscitation technique will be stressed.

Cell and Molecular Biology

T.H.J. Huisman, Chairperson; A. Abdel-Latif; E. Abraham; G. Best; O. Black; G. Brownell; J. Bulkacz; G. Burnett; S. Bustos-Valdes; T. Dirksen; J. Erbland; F. Garver; S. Gelfant; K. Hall; W. Harms; J. Hill; E. Howard; J. Howard; J. Israel; K. Lanclos; D. Lapp; F. Leibach; J. McPherson; C. Nair; A. Reese; C. Roesel; G. Schuster; D. Scott; C. Sharma; R. Shimp; S. Singal; L. Smith; R. Sobel; T. Stoming.

CMB 244. Survey of Inorganic and Organic Chemistry. (5-0-5 hours)
Prerequisite: Algebra, may be concurrent with course.
A study of basic chemical laws, theories and principles. The course includes atomic structure, molecular formation and reactions. Organic preparation, nomenclature and reactions of carbon compounds.

CMB 310. Introductory Microbiology. (5-0-5 hours)
An introduction to the nature of microorganisms, medical microbiology and immunology. Content will include morphology, physiology and taxonomy of representative microorganisms; bacteria, fungi and viruses of medical importance and their relation to diseases of man.

CMB 345. Survey of Biochemistry. (5-0-5 hours)
Prerequisite: CMB 244 or equivalent
A study of the chemical principles of living organisms. The course includes the structure of biomolecules, energy yielding processes, energy requiring processes and transfer of genetic information.

CMB 501. Disorders of Metabolism.
A student in this elective will study functional and inherited disorders of metabolism and transport. The student's time may be divided among some or all of the following: specific readings in the literature, discussion, study of patients, observations of or participation in laboratory studies.

CMB 550. Medical Biochemistry. (8-0-8 hours)
This course has two main objectives: (a) to provide and develop the basic biochemical principles needed in understanding the normal process occurring with cells and the coordination of all of these processes into a normally functioning biological machine; (b) to use these principles to analyze commonly occurring health-related problems in terms of their biochemical components. Eight hours of lecture are presented weekly.

CMB 570. Medical Microbiology. (10-0-10 hours)
CMB 571. Medical Microbiology. (4-0-4 hours)
A lecture and laboratory course which considers the characteristics and properties of microorganisms, their role in the disease process and selected aspects of diagnosis and treatment of infectious disease. Eight hours of lecture per week and conferences at periodic intervals.

ITD 550. Neuroscience. (6-6-9 hours)
See course description under Interdepartmental Courses.

Additional courses are listed under the School of Graduate Studies.

Dermatology

J. G. Smith, Chairman; D. Abele; D. Chalker; S. Gelfant; C. Sharma.

DER 501. Dermatology Clinical Clerkship.
One-month clerkship experience on the dermatology service. Students will see inpatients and outpatients at the Talmadge Hospital and also outpatients at dermatology clinics at Fort Gordon, University and VA Hospitals. Students participate in Dermal Pathology Conferences, Journal Clubs, and Basic Sciences Seminars. Supervision will be provided by the full-time staff and clinically faculty of the Department of Dermatology and the dermatology housestaff. Off-campus electives may be arranged with prior approval of the faculty.

Endocrinology

V. B. Mahesh, Chairman; T. Abney; V. Bhalla; W. E. Braselton; J. R. Byrd; A. Costoff; C. Hendrich; F. Leibach; T. Mills; T. Muldoon.

END 501. Research in Endocrinology. (Special Elective)
Consists of study of biosynthesis, secretion and metabolism of hormones in health and disease and introduction to research techniques, including cytogenetic techniques in the field of endocrinology.

ITD 501. Clinical Endocrinology and Reproduction.
See course description under Interdepartmental Courses.

ITD 530. Endocrinology, Reproduction and Population.
See course description under Interdepartmental Courses.

Additional courses are listed under the School of Graduate Studies.

Family Practice

J. Calvert, Chairman; M. Arnold; A. Brown; G. Garrison; W. Gullen; J. Hornsby; J. O'Neal; H. O'Rear; J. Palmer; F. Payne; A. Peyton; H. Pinson;

G. Poda; R. Pogue; D. Purdy; N. Ramage; W. Revell; T. Sappington; J. Sewell; E. Singletary; I. Streiff; L. Thomas; J. Tollison.

FMP 501. Family Practice and Cardiovascular Disease.
(Preceptorship Special Elective)

This off-campus elective, held in a private practice clinic in Claxton, Ga., provides an opportunity to observe and participate in a well developed example of Family Practice. This elective can also include activities at the community hospital. As an optional opportunity, students interested in the epidemiology of cardiovascular disease may review the data from the Evans County Cardiovascular Research Project.

FMP 503. Automative Assistance in the Department of Health Care.
(Preceptorship Special Elective)

The purpose of this elective is to give the student the opportunity to develop an overview of automative assistance as it is used in health care, to work closely with an interdisciplinary group studying these automative assistance systems, and to participate in operational projects oriented toward specific areas within these information systems. The student will also be given the opportunity to develop projects of personal interest. This elective will be tailored toward the specific interests of each individual student.

FMP 504. Introduction to Group Practice.
(Preceptorship Special Elective)

The purpose of this off-campus elective held in Toccoa, Ga., is to provide the student with a personal experience in working with a medium size multi-specilty group (18 man) practice in a small city serving primarily a rural population and a better understanding of primary medical care and its relationship to specialty medical care within the setting of a group practice. The student will choose two of the group practice physicians (representing two of the following fields: family practice, internal medicine or pediatrics) and will spend a considerable portion of his time with these two physicians in their daily office practice and hospital rounds. He will become familiar with the patient populations of the two chosen specialists and the working relationships of these two physicians with the other 16 physicians of the multi-specialty group. Under supervision the students will share in the responsibility for the diagnosis and treatment of the patients of the chosen physicians, and will follow these patients if they require hospitalization or consultation by other members of the multispecialty group. The student will also spend several evenings each week with the physician on call in the evening clinic session of the multispecialty group and on call with his chosen physicians at the Stephens County Hospital Emergency Room.

FMP 505. Experience in Epidemiology Investigation.
(Special Elective)

Students will work closely with the instructors and other staff in conducting on-going epidemiologic investigations. The specific content areas vary and may well involve cancer, medical care delivery, assessment of specific therapies, etc. Appropriate readings and conferences will be included.

FMP 506. Preceptorship—Family Practice.
(Preceptorship Special Elective)

The purpose of this elective is to provide the student with a personal experience in family practice in a community setting. The student will spend time working very closely with a selected family practitioner (through the Georgia Academy of Family Physicians). The student will attend hospital rounds, participate with the family practitioner in his office practice, accompany him on home visits, emergency calls and related activities.

FMP 507. Evaluation of Health Problems and Medical Care—A
(Special Elective)

These seminars are designed to familiarize the students with the basic procedures utilized in valid medical research so that they can evaluate the scientific quality of articles in the journals and more effectively participate in research (if desired) or serve on research advisory committees. The conferences consist primarily of dissection of journal articles and brief outlines of hypothetical research projects designed by the students themselves. The material presented is appropriate to the year of training.

FMP 508. Problem Oriented Family Medical Care—I.

The primary objectives will be to develop skills in history taking and physical examination as well as defining medical and social problems and formation of problem lists. Some time will be spent in discussing medical management for problems. It is anticipated that each student will do a Health Screen Data Base on two or three patients per week. The workup will take place either during the morning or afternoon hours. The rest of the day will be spent in writing up the patient and reading about the various problems. The students will be assigned families and look at the entire family health situation and how certain disease processes affect the family unit. The prerequisites for this elective are successful completion of Phase II.

FMP 509. Problem Oriented Family Medical Care—II.

The objectives of this course are: to expose the medical student to health care delivery in the ambulatory setting of the Family Practice Center; to introduce the medical student to the concepts of continuous, comprehensive, concerned family care and practiced in the ambulatory care, Family Practice Center; to assist the medical student in recognizing and defining patient and family medical and psycho-social problems using the Family Practice Center Health Screen; to assist the medical student in recognizing and defining medical problems of those patients and families seen for immediate care in the Family Practice Center; to assist the medical student in the management of medical care problems commonly encountered in the ambulatory patient setting; and to provide an opportunity for the medical student to understand and deal with the individual's health care problems in the context of the patient's family, job and community. The prerequisites for this elective are successful completion of FMP 508—Problem Oriented Family Medical Care—I.

FMP 513. Problem Oriented Family Medical Care—III.
(Preceptorship Special Elective)

The Family Practice Department of Floyd County Hospital proposed to offer a clerkship with an objective

of development of skills in history taking and physical examination as well as defining medical and social problems and formation of problem lists. Time will be spent discussing medical management for problems. Students will do a Health Screen Data Base on three patients per week. Workups will occur either in the morning or afternoon hours. The remaining time of the days will be spent in writing up the patient and reading about the various problems. Students will be assigned families and look at the entire family health situation and how certain disease processes affect the family unit.

FMP 514. Problem Oriented Family Medical Care—IV. (Preceptorship Special Elective)

The objectives of this course are the same as those for FMP 509.

FMP 515. Evaluation of Health Problems and Medical Care—B. (Special Elective)

This experience is designed to familiarize the student with the basic procedures utilized in valid medical research so that he/she can evaluate the scientific quality of articles in the journals and more effectively participate in research (if desired) or serve on research advisory committees. In addition or as an alternative, the experience can be designed to familiarize the student with the nature of community health problems and community health programs and resources. The methods of instruction are potentially quite varied, including (but not necessarily limited to) readings, conferences, dissection of journal articles, construction of brief outlines of a hypothetical research project selected by the student, field trips, conferences with persons directing various community health problems, etc. Not all methods are required for each participant. The particular course content and mode of presentation will be arranged.

FMP 516. Family Practice Program, Medical Center of Central Georgia. (Preceptorship Special Elective)

This elective is with the Family Practice Residency Training Program in Macon, Georgia. The curriculum will include: daily patient responsibility, both in ambulatory and in-patient setting; review and practical guidance in history taking and organization of the history; review and practical guidance in the physical examination and in organization of the presentation of the physical examination; review and practical guidance in the problem oriented medical record; daily didactic groups and individual teaching sessions in traditional medical subjects; daily didactic groups and individual teaching sessions in ambulatory care; and other medical subjects as indicated by the individual's strenghts and weaknesses.

Humanities

R. Moores, Chairman; R. Martin; Father D. Munn.

HUM 501. Human Sexualty.

An interdisciplinary course designed to aid the student to better understand the sexual problems arising in medical practice. Content of the course includes medical, ethical, and psychosocial aspects of normal and abnormal sexuality. Instruction consists of conferences, selected readings and a special project in the areas of most interest to the student.

HUM 502. Death and Dying.

The course will include readings in the meaning of death, patient and physician reactions to death, as well as patient interviews and instruction in the care of the dying patient.

HUM 503. Religious Thought and Psychiatric Theory.

To investigate culturally and philosophically the influence of mysticism and religious practices on the psychological development of the individual.

HUM 504. Religion and Medicine.

An opportunity will be provided for the student to investigate various aspects of religious faith and practice as they relate to the practitioner, the patient and the delivery of health care in our society. The specific focus of the course will be decided in terms of the student's needs and interests.

HUM 505. Special Electives for Individuals may be Arranged.

HUM 506. Philosophy and Medicine.

The course will investigate the philosophical structure, methodologies and basic presuppositions of medical research and practice. Examples of alternative topics to be examined might include Empiricism and Clinical Awareness, the Scientific Community and the Validity of Research, the Historical Development of the Science of Medicine, the Logic of the Scientific Method, Fact and Faith in the Scientific Worldview, and/or others of interest to student and instructor. Methods of instruction will include readings, vigorous discussion and optional camping field-trips.

HUM 507. Ethical Issues in Medicine.

Participants will explore some of the most significant and interesting problems arising out of the practice of medicine using the tools of ethical analysis. The selection of specific issues will depend upon the mutual discretion of student and instructor. Examples might include such general topics as informal consent, human experimentations, reproduction, the patient-physician contract, health care distribution, organ transplantation, care of the dying, and so forth. The course will consist of cooperative research in library and clinical settings.

HUM 550. Humanities. (2-0-2 hours)

This course is designed to bring to the attention of the medical student several important areas of concern to the physician which are not dealt with in the scientific curriculum. Issues such as the relationship between medicine and law; religion and philosophy; bio-medical ethics; death, dying and grief are some of the areas covered.

Medicine

J. P. Bailey, Acting Chairman; A. Abdulla; D. Abele; H. Adams; H. Althisar; S. Alvarex-Mena; E. Berg; P. Bihl; O. Black; J. Blalock; J. Boineau; E. Bransome; W. Braselton; W. Brown; C. Butler; D. Cabaniss; M. Canedo; A. Carr; M. J. Carter; W. Chew; E. Cook; R. Cook; R. Cormier; P. Cundey; G. Dasgupta; A. Dennis; D. Dunlap; L. Ellison; R. Erdin; G. Faguet; D. Feldman; E. Feldman; M. Frank; G. Garrison; J. Ginsburg; T. Gongaware; J. Griffin; J. Hudson; T. Huff; T. Huisman; J. Kelly; H. Killman; Z. Kilpatrick; C. King; G. King; R. Kolbeck; T. Kuske; J. Lewis; R. Little; F. Livingston; M. Logan; C. Lutcher; J. Lyon; G. Magarian; K. McFarland; H. Mealing; H. Middleton; P. Milner; V. Moore; W. Moore; R. Moores; M. Morgan; E. Mucha; Father Munn; J. O'Connor; T. Ozawa; M. Page; L. Parivisutt; F. Parrott; R. Patton; K. Reeves; J. Rissing; F. Rivas; A. Rodriguez; B. Schienaman; M. Singh; E. Singletary; J. Smith; L. Smith; D. Spearman; W. Speir; S. Stefadouros; H. Sussman; L. Thomas; J. Tyler; H. Wall; J. Waller; P. Webster; M. Williams; A. C. Witham; C. S. Wright.

MED 500. Basic Clerkship in Medicine.

A three-month medical clerkship intended to provide a basic grounding for clinical medicine. It is organized to help students learn to obtain and evaluate information regarding patients by participating in the health care team. The clerkship emphasizes basic approaches to solving problems presented by illness, particularly in the realm of internal medicine. Scheduled: June, September, December, March.

MED 501. Substitute Internship at VA Hospital.
MED 502. Substitute Internship at VA Hospital.

Students in this elective function as acting interns on the general medicine services and medical out-patient clinic at Veteran's Administration Hospital. Since there is usually an intern on each of the services, the student will alternate patients with the intern and will function as the intern in the initial work-up, treatment and care of these patients. The student will be closely supervised by the resident and faculty physician attending on the service. The substitute intern will be responsible for planning and instituting the diagnostic work-up and therapeutic program for his patients. In addition, he will assist in the teaching of junior medical students assigned to his service. In summary, the student will *be* a substitute intern with as much responsibility as may be delegated under the laws of Georgia.

MED 503. Substitute Internship at University Hospital.

Students will function essentially as interns, except that orders on charts must be countersigned. The student will participate in rounds, conferences, clinics, and ward-work. The clinical faculty of the Department of Medicine serves as the primary faculty for this course.

MED 504. Substitute Internship at Eisenhower Hospital (Fort Gordon).
MED 505. Substitute Internship at Eisenhower Hospital (Fort Gordon).

The student will participate in rounds, conferences, clinics, and ward-work. The staff of the hospital will serve as faculty for this course. Students can be assigned to the Internal Medicine Service or to Cardiology, Gastroenterology, or Pulmonary Disease Services: a maximum of two students at a time can be assigned to Internal Medicine, Cardiology, or Pulmonary Disease Services: a maximum of one student at a time can be assigned to Gastroenterology.

MED 506. Rheumatology.
MED 507. Rheumatology.

A clinical multi-disciplinary experience in the rheumatic diseases with a basic core of material pertinent to major diseases in this area; experience with consulting and clinical material. Special desires for more defined endeavor by the student will be considered.

MED 508. Hematology.

Objective: On completion of the elective, the student should have the ability to diagnose, on the basis of clinical and laboratory findings, and treat the common hematologic problems. *Method:* The material is outlined around clinical problems using core manuals, slide tapes, films, microscope sessions, suggested readings, round robin discussions and conferences. Patient contacts and discussions are provided via consultations, rounds, outpatient clinic, and tough-case conferences.

MED 509. Hematology at VA.

This elective is designed to provide the basics in clinical hematology. It includes in-depth study of the pathophysiology relating to hematologic disorders and the performance, by the student, of basic hematologic procedures. The technique of obtaining, preparing and interpreting blood and marrow morphology is strongly emphasized as is the performance of routine coagulation screening studies, e.g., prothrombin time, partial thromboplastin time, thrombin time, platelet count and fibrin split products. The Coombs test and hemoglobin electrophoresis are demonstrated as points of departure for discussion of blood banking procedures and the hemoglobinopathies. A single half day clinic each week is arranged to emphasize the diagnosis and therapy of hematologic disorders that are commonly encountered by the practicing physician.

MED 510. Sickle Cell Anemia Studies.

This will be a joint elective in sickle cell anemia for about three medical students who will work one or two ½ days per week in the Sickle Cell Clinic and will participate in seminars in which the clinical care of the sickle cell patient is emphasized and will work in the Protein Chemistry Laboratory.

The teaching will include identification and quantitation of the variants. Special attention will be given to the genetic basis for the occurrence of the various abnormalities through the study of family members of the affected individuals.

MED 511. Metabolic and Endocrine Research.

Having completed one or two months of the standard elective in Clinical Endocrinology and Reproduction, the student by special arrangement with a division faculty

member who will serve as preceptor can undertake a study in clinical or laboratory research directed toward a specific problem in endocrinology. At the same time, the student will participate in rounds, conferences, etc.

MED 512. Nephrology.
Cover clinical nephrology through: Evaluation and treatment of in-patient consultations, twice weekly general seminars, once weekly biopsy conferences, once weekly clinical conference, once weekly uremia conference, once weekly out-patient clinic and out-patient conference. (See MED 536.)

MED 513. Clinical Cardiology.
The concentration is on electrocardiographic interpretation and consultative cardiology, but students should also gain a familiarity with diagnostic ultrasound, phonocardiography, and other noninvasive recording techniques. The clinical emphasis is on correlation of treatment, physical findings and hemodynamic data.

MED 514. Cardiology: Clinical Hemodynamics.
Students will have the opportunity to work-up patients admitted for special diagnostic studies with known cardiac problems and improve their physical diagnosis skills. They will help in management decisions and participate in the exercise evaluation of these patients and in the interpretation of ECG, X-rays, pulmonary function data and all data obtained at cardiac catherization.

MED 515. Cardiology at Eisenhower Medical Center (Fort Gordon).
This course is designed to provide basic knowledge in the problems of heart disease and its complications. Students will participate in the care of patients in the Intensive Care Unit as well as on medical wards and out-patient service. They will also spend time understanding and reading electrocardiograms, vectorcardiograms, and phonocardiograms.

MED 516. Cardiology at VA.
Both months will be spent with emphasis on direct patient care and management based on sound approaches to cardiologic diagnosis. With the exception of writing orders without counter signature, the student taking this elective will in general have the same duties, activities and program as for any assigned to the Cardiologic Service. This includes the fact that on holidays and vacation, the student will operate on a "house staff" schedule rather than on any student vacation schedule which might be issued administratively. The students will have the opportunity to read first-hand electrocardiograms, to obtain and interpret other special procedures as indicated including esophageal electrocardiograms, phonocardiograms and external pulse tracings. If the student desires, he may have the opportunity to read and record vectorcardiographic interpretations. An effort is made in this elective to bridge the gap for the senior medical student between the role as student and the role as an autonomous M.D.

MED 517. Gastroenterology at TMH.
This course is designed to provide an understanding of clinical aspects of diseases of the digestive system, including endoscopy, interpretation of gastrointestinal X-rays, biopsies and laboratory tests. It consists of rounds, conferences and clinics at the Talmadge Hospital.

MED 518. Further Studies in Gastroenterology.
At the TMH or the VA Hospital, the student will broaden his knowledge in gastrointestinal pathophysiology and disease. The student may pursue in-depth interest in a laboratory or clinical research problem.

MED 519. Gastroenterology at VA Hospital.
In this course the student becomes familiar with the approaches to the patient with gastrointestinal and liver problems. He is given the opportunity to observe and participate in specialized instrumentation and laboratory studies that are used in this field. The student has the opportunity to plan patient management under the supervision of faculty members.

MED 520. Medical Chest at TMH.
This course is designed to provide experience in the clinical evaluation of chest diseases. It consists of rounds, clinics and conferences, all spent primarily on patient evaluation and management. Special emphasis is placed on chest X-ray interpretation, pulmonary function testing, the interpretation of arterial blood gas studies, and other selected major topics of pulmonary medicine.

MED 521. Medical Chest VA Hospital.
Experience in a clinical setting caring for patients with varied respiratory disorders. Includes participation in a pulmonary intensive care unit, managing patients with respiratory insufficiency.

MED 522. Infectious Disease.
This course is designed to provide an opportunity for the student to gain experience in the clinical diagnosis and management of patients with infections, interpretation of specimen stains, cultures, and sensitivity data and appropriate use of antibiotics. The elective consists of rounds and conferences at the TMH and VA Hospitals. Half of the students will be at each hospital, with student preference honored insofar as possible.

MED 523. Lipid Metabolism and Nutrition.
The elective will provide experience in diagnosis, treatment, and pathophysiology of disorders of clinical nutrition and lipid metabolism via out-patient clinic, consultations, rounds and conferences. A part-time elective in Lipid Clinic may also be arranged. Opportunity is provided for participation in clinical studies of hyperlipidemia and vascular disease and epidemiology of hyperlipidemia.

MED 524. Electronics as Applied to Medicine.
Attempts to give fundamental knowledge of simple electronic circuits. With this as a basis, discussion is offered on application of electronics in cardiology, electrophysiology and biochemistry. Stress is laid on pitfalls and limitations in use of electronic measurements systems.

MED 525. Preceptorship in Internal Medicine. (Special Elective)
Clinical preceptorships spent working closely with members of the clinical faculty of the Department of Medicine can be arranged. Each student will accompany the preceptor in his office and hospital functions during the period of the elective.

MED 526. Special Elective in Nephrology at University Hospital.
A clinical experience in nephrology.

MED 527. Preceptorship in Renal Medicine. (Special Elective)
A clinical preceptorship during which the student will accompany a private practitioner on rounds at Doctor's Hospital, in his office, and in the chronic dialysis unit, Professional Building, Doctor's Hospital.

MED 528. Off-Campus Elective. (Special Elective)
Special arrangements can be made for elective periods of one to two months in the Department of Medicine at other medical schools and teaching institutions. These electives can be spent in general internal medicine or medical sub-specialties.

MED 529. Research Elective in Medicine. (Special Elective)
Opportunity to participate in research programs being conducted by members of the faculty of the Department of Medicine. A list of projects and preceptors is available in the office of the chairman of the Department of Medicine.

MED 530. College Health. (Special Elective)
Out-patient and in-patient diagnosis and treatment of physical and mental health problems in college students at the University of Georgia under the supervision of full-time staff. Regular conferences, reference library; laboratory and X-ray facilities. Allowance is made for living expenses while in Athens.

MED 531. Internal Medicine Clerkship. (Special Elective)
Off-campus clerkship in internal medicine including initial contact and work-up of acutely ill patients under supervision of more senior house staff and attending physicians. Attendance at daily teaching rounds, conference and clinics. (The Medical Center, Columbus, Ga.)

MED 532. Advanced Clerkship at Savannah Memorial Hospital. (Special Elective)
Advanced medical clerkship in internal medicine. Includes work-up of patients with hospital and clinic attendance on rounds and at conferences. Teaching is done by full-time faculty and practicing physicians.

MED 533. Advanced Clerkship at the Medical Center, Central Georgia. (Special Elective)
The student will be assigned to a specific ward where he will see, evaluate and suggest diagnostic and therapeutic regimens on 3 new patients each seek under the tutelage of members of the medical staff. He will attend one general practice out-patient clinic and 3 sessions of teaching rounds each week. He will be assigned night duty as any extern every third night. He will be expected to participate in medical grand rounds every Wednesday morning as well as other regularly scheduled medical conferences.

MED 534. Advanced Clerkship at Georgia Baptist Hospital. (Special Elective)
The Department of Medicine at Georgia Baptist Hospital in Atlanta, Georgia, offers a clerkship in Internal Medicine for senior students interested in general internal medicine, cardiovascular or pulmonary medicine and gastroenterology. Two clerkships are offered for any given period of time and will involve evaluation and management of patients—both in-patient and out-patient. The program to include conferences, rounds and seminars is under the direction of full-time department physicians in internal medicine.

MED 535. Hypertension and Clinical Pharmacology.
Over 840 patients with a high blood pressure disease are being followed on an out-patient basis. The diseases are varied; around 15% have either renovascular high blood pressure, past pheochromocytoma, endocrine high blood pressure or renal disease. The majority have essential hypertension. This is an opportunity to have an experience with the many medical, social and economical problems encountered when continued control of blood pressure is the goal. High blood pressure is a problem which affects around 10-15% of adult Americans. Physicians have to face this problem and should be able to handle it efficiently and correctly.

MED 536. Nephrology at the VA Hospital.
Experience in clinical nephrology predominantly through evaluation and management of in-patient consultations. Teaching conferences and seminars will be held in conjunction with MED 512. Some of these will be alternated between the two hospitals, others will be based at TMH throughout, but scheduled so as not to conflict with VA activities. Some out-patient experience at VA is planned.

MED 537. Diabetes Camp Elective.
The diabetes camp elective was established in cooperation with the Georgia Diabetes Association. Since 1971 the Georgia Diabetes Association has operated a two-week camp for diabetic children age 9 to 15. The diabetes unit at the Medical College of Georgia provides physician support for the camp, in concert with the Department of Pediatrics, and physicians in the Atlanta area. Students spend the entire two-weeks in residence at the camp (at Waco, Georgia, 4 miles west of Bremen) and actively participate in all aspects of care of the children including general medical care, designing and observing diabetic treatment regiments, and the basic procedure of teaching the patient. The camp provides a unique opportunity for close-up observation and treatment of juvenile diabetes. Staff includes strong dietary support, diabetes teaching nurse specialists, house staff coverage via Department of Pediatrics, faculty. Didactic sessions will be given before or after the camp, during the other two weeks of the elective. These will cover newer aspects of diabetes etiology, pathophysiology, complications, and treatment.

MED 538. Clinical Cardiology.
The student will serve as an extern to three physicians engaged in the group practice of cardiology. This will involve diagnostic work-up, rounding on hospitalized patients, and training in the use of the non-invasive

techniques of patient study including ECG, flouroscopy, treadmill, echo, sound and external pulse recordings. An 8-bed coronary care unit is heavily utilized, and emergency procedures are stressed. The same self-teaching aids and end of course testing will be used as in MED 513.

MED 539. Clinical Cardiology.
The student will serve as an extern to a partnership of two physicians in the private practice of cardiology. The patient population is heavily weighted toward suspected or real coronary artery disease and there is extensive use of cardiac catheterization, stress tests, and other non-invasive procedures. Students will also assist in the examination of newly referred office patients, management of those in the hospital, and the daily interpretation of electrocardiograms. The self-teaching aids and end-of-course tests, as used in MED 513, will be available.

ITD 501. Clinical Endocrinology and Reproduction.
See course description under Interdepartmental Courses.

Neurology

J. Green, Chairman; J. Armstrong; J. Collins; P. Dyken; D. Feldman; W. Hamilton; L. Hartlage; P. Hartlage; G. Katter; D. Marcus; M. Martin; C. McClure; J. McCord; R. Mercille; R. Neil; S. Nesbitt; G. Pruitt; C. Rosengart; D. Smith; T. Swift; T. Thevaos; J. Trefz; D. Walker; J. Wilson.

NEU 509. Preceptorship in Neurology. (Special Elective)
The student will have an opportunity to evaluate and participate in the management of patients seen in the private practice of neurology and pediatric neurology in the Augusta or other areas around the county by special arrangement with a known preceptor and the chairman of the Department of Neurology. In the Augusta area, the student will see emergency and non-emergency hospital consultations and all new hospital patients admitted by his preceptor. The student will attend appropriate teaching conferences at MCG and affiliated hospitals when possible.

NEU 510. Advanced Tutorial in Neurology. (Special Elective)
NEU 511. Advanced Tutorial in Neurology. (Special Elective)
NEU 512. Advanced Tutorial in Neurology. (Special Elective)
From one to three months of tutorial study and/or investigation of a subject in depth may be arranged with any faculty member or the Department of Neurology. The subjects are only limited by the interests of the student.

NEU 513. Developmental Disabilities. (Special Elective)
The student will be a member of an interdisciplinary team which will include nursing, occupational and physical therapy, and social work students. The team, under supervision of a special preceptor, will be assigned to clinic and community projects involving resources for the retarded, epileptic, and cerebral palsied. The student will learn how to work effectively with colleagues from other disciplines in behalf of the handicapped.

NEU 514. Elective at Carville. (Special Elective)
The Department of Neurology and the United States Public Health Service Hospital, Carville, Louisiana offer an elective in Hansen's Disease. The purpose of the elective is to acquaint the student with this multifaceted disease as well as to provide an in-depth look at the only Leprosarium in the continental United States. Emphasis is on the clinical features of the disease, the problems of insensitivity, and rehabilitation. Medical students will be given an opportunity to work up patients.

NEU 515. Clerkship in Ambulatory Neurology. (New Elective)
Students will see a wide range of neurologic problems as encountered in office practice. Schedules will be individualized and permit attendance at adult and pediatric neurology clinics. Students may attend selected rounds and conferences. There will be no assigned in-patient responsibilities. Through a cooperative arrangement with Family Practice, students may choose to attend some clinics emphasizing primary care.

ITD 502. Basic Clerkship in Pediatric Neurology.
See course description under Interdepartmental Courses.

ITD 503. Advanced Clerkship in Pediatric Neurology.
ITD 504. Advanced Clerkship in Pediatric Neurology.
See course description under Interdepartmental Courses.

ITD 550. Neuroscience. (6-6-9 hours)
See course description under Interdepartmental Courses.

ITD 560. Clinical Neurology.
See course description under Interdepartmental Courses.

Obstetrics and Gynecology

W. A. Scoggin, Chairman; M. Bahreini; W. Barfield; W. Barfield, Jr.; E. Biggerstaff; E. Bronstein; C. I. Bryans; Y. S. Cheng; R. Daitch; H. Fadel; J. Frank; M. Freedman; J. Green; D. Hightshue; W. T. Jenkins; J. Johnson; R. Lemon; T. J. Lin; P. McDonough; V. McNamara; W. Moore; G. Nelson; R. Owen; L. Singer; J. Souma; M. Souma; O. E. Talledo; P. Wilds; G. Williams; V. Zachert.

OBG 500. Basic Clerkship in Obstetrics and Gynecology.
This required basic clerkship of six weeks duration combines in-patient and out-patient experience in human reproduction and in disorders of the female reproductive system. Some students will be at TMH. They will spend

three weeks on the obstetrics service and three weeks on the gynecology service. One week of gynecology will be gynecologic endocrinology and the laparoscopy project. Some students may draw assignments at 1) Medical Center of Central Georgia in Macon; 2) Memorial Medical Center of Savannah; and 3) Medical Center of Columbus, Georgia for their clinical experience in Obstetrics and Gynecology. Scheduled June through May.

OBG 501. Obstetrics and Gynecology.
(Special Elective with Hospital Medical School)
This senior elective is offered by arrangement with various hospitals and medical schools in the United States and overseas. The course will be designed to fit each student's particular needs and may be either clinically oriented or research oriented.

The student must obtain a letter of acceptance stating who will be the supervisor and evaluator and also a curriculum vitae showing OB-GYN training of the supervisor is needed.

OBG 502. Obstetrics and Gynecology.
(Special Elective with Preceptors)
The senior student will work under the direct supervision of the preceptor in the evaluation and treatment of the preceptor's private patients both in the office and hospital setting. The student will be responsible for preoperative care of the patients as designed by the preceptor. A letter of acceptance by the preceptor as well as his curriculum vitae are necessary. The letter needs to state who will supervise and be responsible for the student's evaluation.

OBG 503. Obstetrics and Gynecology.
(University Hospital)
This senior elective is offered at the University Hospital where the student works under the supervision of the Medical College of Georgia residents and clinical faculty on the ward service. The student is given responsibility for the evaluation and care of patients consistent with demonstrated abilities.

OBG 504. Obstetrics and Gynecology.
(Jacksonville, Florida)
The senior student is assigned responsibility for the evaluation and care of obstetric and gynecologic patients under the supervision of the resident physicians and staff physicians at Jacksonville hospitals. The teaching department is a part of the University of Florida Medical School. There will be core students from Gainesville as well as MCG students.

OBG 505. Obstetrics Research.
(Talmadge Memorial Hospital)
Laboratory tests being used for the evaluation of fetal well being and fetal maturity as well as variables that make them difficult to interpret (such as effect of drug ingestion on estriol excretion or effect of blood or meconium on Δ 450 mu O.D. calculation). At the completion of this elective, the student should be thoroughly versed in the laboratory techniques for evaluation of high risk pregnancies.

OBG 512. Obstetrics and Gynecology.
(Georgia Baptist, Atlanta, Georgia)
The senior student is assigned responsibility for the evaluation and care of obstetrics and gynecologic patients under the supervision of the resident physicians and staff physicians.

OBG 513. Obstetrics and Gynecology.
(Rome, Georgia)
The senior student is assigned responsibility for the evaluation and care of obstetric and gynecologic patients under the supervision of the resident physicians and staff physicians.

OBG 515. Obstetrics and Gynecology.
(Grady Hospital, Atlanta, Georgia)
The senior student will be assigned responsibility for the evaluation and care of obstetric and gynecologic patients under the supervision of the Chief of Obstetrics and Gynecology.

ITD 501. (gyn) Interdepartmental — Clinical Endocrinology and Reproduction.
See course description under Interdepartmental Courses.

Ophthalmology

M. Luxenberg, Chairman; E. Fineberg; K. Green; D. Hull; F. Maddox; R. Schulze.

OPH 501. Ophthalmology Clerkship.
(Advanced Course—Clerkship)
The student participates with the residents and faculty in their daily departmental activities. This includes seeing and evaluating patients with the residents and faculty, participation in work rounds, conferences and lectures, and observation of some surgical procedures.

OPH 502. Ophthalmology Research Elective.
(Special Elective)
An area of mutual interest at the student and faculty supervisor will be selected and the student will outline his research project with literature references and carry it out under supervision. A written report on the project is required at the end of the elective period.

OPH 503. Ophthalmology Off-Campus Experience.
(Special Elective)
Special arrangements can be made for elective periods of one or two months in a Department of Ophthalmology at another medical school, to study some phase of ophthalmology such as ophthalmic pathology, neuro-ophthalmology, etc. Written approval must be obtained in advance from both the MCG Department of Ophthalmology and the department where the elective is to be taken. A resume of work done will be turned in to the MCG Department of Ophthalmology at the end of the rotation, and a letter of evaluation from the supervising department is required.

Pathology

A. B. Chandler, Chairman; Y. Akamatsu; J. Arrington; B. Barton; H. Conner; J. Crosby; F. Goodale; A. Hollingsworth; L. Iverson; F. John-Sanchez; D. McFarland; L. Mills; P. Milner; L. Otken; H. Puchtler; R. Rao; B. Spurlock; L. Stoddard; J. R. Teabeaut; L. Vacca; F. Waldrop; J. Walker; F. Raghmai.

PTH 501. Anatomic Pathology.
(Special Elective)

The student will perform approximately 10 to 20 autopsies under the supervision of the staff, develop fully the problems presented, and review the recent related literature. In addition, the student will help prepare a weekly conference for the combined meeting of the Medicine and Pathology Departments.

The student will review the interesting surgical pathology cases each week and attend Surgical Pathology Conference held with the Department of Surgery. He may attend a variety of other conferences each week.

PTH 502. Current Autopsy Case Studies.
(Special Elective)

The program has been designed for the study of human disease by thorough autopsy investigation enabling the interested student to pursue his studies at a deeper level of experience. Students have the same responsibilities as the resident staff with regard to their study and presentation of autopsy cases.

PTH 503. Research in Histochemistry.

The subject would be determined individually and would depend on the interest of the student as well as on the material available, e.g., arteriosclerosis in children and adults, lesions of myocardium, alterations of biliary pathways in various diseases, histochemistry of renal diseases, alterations of thymic myoepithelial cells in infants, histochemistry of fibrous proteins (collagens, elastin, myosins), chemical basis of staining methods.

PTH 504. University Hospital Pathology Laboratory. (Special Elective)

Electives will be offered in most phases of practice of pathology including surgical pathology, autopsies, hematology, blood banking, chemistry, bacteriology, cytology or radioisotopes. Special work will be assigned to the student for background purposes.

PTH 505. Experimental Cancer Research.
(Special Elective)

Each student could participate in current research activities in animal models of neoplasms, such as those of breast, liver, G.I. tract, skin, lung, urogenital system. Use of laboratories such as animal surgery, cell culture, histology, electron microscopy, immunology could be arranged.

PTH 506. Nuclear Medicine.

Students will participate in the service offered by the department on a preceptor basis. They may expect to become familiar with current applications of radioisotopes to clinical problems.

PTH 507. Surgical Pathology.

To participate in all activities of the Division of Surgical Pathology. Limited responsibility under close supervision will be commensurate with ability and interest.

PTH 508. St. Francis Pathology Laboratory.
(Special Elective)

Depending on the specific background and needs of the student, various programs can be arranged ranging from the performance and study of autopsies and surgical pathology material to the acquisition of knowledge in specific laboratory tests, introduction to automated system in the clinical laboratory. Correlation of clinical data with symptoms and a clinical course of patients. Development and work on specific research problems in the field of genetic and developmental anomalies. Problems of neural anatomy and neuropathology.

PTH 509. Teaching Elective in General and Special Pathology.

Responsible involvement in teaching of pathology during Phase II using the case teaching seminar method. The major divisions of subject material, i.e., inflammation, neoplasis, etc., afford opportunity for the student to prepare himself and his teaching materials in a circumscribed area. At least one formal lecture should be a part of this experience.

PTH 510. St. Joseph's Hospital Pathology Laboratory.

Students are instructed and participate in the description of gross surgical specimens in cytological techniques, frozen section techniques, and in autopsy pathology. This can be extended to any facet of radioisotope procedures and clinical laboratory procedures including automation. This program is flexible and can offer areas of study other than surgical and autopsy pathology. The student will be expected to attend approximately five conferences weekly.

PTH 511. Clinical Laboratory, Microbiology.

Application of modern clinical microbiological techniques including cultures and antibiotic sensitivity to patient care. Opportunity for participation in special techniques such as fluorescent antibody studies, anaerobic cultures, mycology and serological procedures will be available.

PTH 512. Clinical Chemistry.

Application of biochemistry, pathophysiology, instrumentation and statistics to the interpretation of data for the diagnosis of patients. Opportunity to work on specialized pieces of equipment including twelve channel auto analyzer and anatomic absorption spectrophotometer will be available.

PTH 514. Immunohematology and Blood Banking.

Patient care and treatment utilizing the theoretical and practical aspects of immunohematology and modern use of blood components. The student will be expected to learn the basic bench techniques in typing and cross matching of blood as well as the preparation of blood components. There will be didactic consideration of the immunologic, genetic and anthropologic significance of blood group and antibodies with special emphasis on their serologic and immunochemical characteristics as related to modern medical practice.

PTH 515. General Clinical Laboratory. (Laboratory Medicine)

Patient care through the practical application of clinical laboratory methods and evaluation of results is the basis of the elective. Fulfillment of this objective will be pursued through patient rounds, interpretation of laboratory data, participation in patient treatment, particularly the use of blood and blood components, attempting to develop an appreciation for sources of false data generation either internally or externally, the development of tests and their evaluation as to future clinical utilization and active participation in laboratory medicine on didactic presentations. An opportunity to develop the techniques in hematology, microbiology, clinical chemistry, microscopy, immunohematology and blood banking will be available.

PTH 516. Cardiac Pathology.

Special study of a facet of heart disease may be arranged. Such studies will be in the area of cardiovascular disease using morphologic and histochemical techniques. Emphasis is on pathophysiology and structural basis. Usually two elective periods or an elective and fellowship period will be required to complete the project.

PTH 517. Radio Bioassay.

The use of isotopes in the chemistry laboratory for the quantitation of antigen-antibody reactions measuring biochemical materials present in small nanogram quantities in the blood.

PTH 518. Laboratory Hematology.

The course is designed for students who want to learn and understand how to correlate the practice of hematology as it is applied to clinical uses. Daily work is divided into four periods: (1) methodology, (2) faculty and staff conferences, (3) lectures and self-instructional material and (4) clinical work. The student should be able to identify, classify and recognize the functions of the blood cells as they relate to human health and disease. Recognize the significance of different hematology tests, the information obtained from each, its clinical implication and understand the principle involved. Classify anemias and their causes, leukemias and lymphoproliferative disorders, plasma cell dyscrasias and coagulation defects. Understand the fundamental of hemotherapy, cytodiagnosis and urinalysis.

PTH 519. Basic Neuropathology.

This is a basic neuropathology course designed only for a student who intends to choose neuropathology, neorosurgery, neurology, or other neurological science related fields as a subspecialty in his medical career. The course is flexible in proportions of laboratory and clinical experience.

PTH 520. Introductory Electron Microscopy.

This program is designed to acquaint the student with the techniques currently being employed in biological electron microscopy. The area of study will include laboratory demonstrations of these techniques and their application to teaching and research in pathology. An opportunity to develop some of these techniques will be available.

PTH 521. Elective in Immunopathology.

This elective will give a student an opportunity to study modern immunology at the laboratory level. This will include immunoelectrophoresis and fluorescent antibody work.

PTH 560. Laboratory Medicine.

The purpose of this course is to introduce the student to practical utilization of the laboratory, and the value of certain laboratory procedures as diagnostic and therapeutic aids. Course format includes lecture and laboratory sessions.

Pediatrics

A. Robertson, Chairman; G. Armstrong; E. Aziz; B. Belk; J. Bennett; L. Calvert; M. J. Carter; W. Covitz; H. Dannawi; J. Danoff; L. Dunaway; P. Dyken; K. Forde; J. Green; J. W. Greene; D. Hahn; L. Hartlage; P. Hartlage; K. Henderson; C. K. Ho; W. Kanto; W. Karp; P. Larson; C. Linder; B. Marino-Fuller; J. McFarlane; R. Mercille; M. Miller; H. B. O'Rear; R. Parkhurst; P. S. Rao; E. Self; J. Smith; O. Spivey; W. B. Strong; T. Thevaos; J. Voyles; B. Wray.

PED 500. Basic Clerkship in Pediatrics.

A six-week pediatric clerkship to provide basic grounding in child health and human development. It is organized to help students develop skills in pediatric history taking and physical diagnosis and in the interpretation of laboratory findings in the various age groups, including nursery, ward and out-patient clinics. The recognition of normal developmental patterns as well as the impact of age in the expression of disease will be emphasized. Scheduled June through May.

PED 501. Neonatology Clerkship and Newborn Follow-Up.

The student will participate actively in the care of term and low birth weight newborn infants. He will learn some special techniques involving evaluation and management of high risk and sick infants. He will also follow infants discharged from the newborn nurseries.

PED 502. Fort Gordon Pediatric Clinic.

Students are given the opportunity to assume progressive responsibility and independent judgment in the management of pediatric patients in a group practice setting under the preceptorship of Army pediatricians. A broad range of general pediatric medical care is emphasized in out-patient clinics, wards, well baby conferences and newborn nurseries.

PED 503. Off-Campus Clerkship. (Special Elective)

This special elective is offered to provide the student with experience in pediatrics in an off-campus situation. It can be served either in a hospital or in a preceptor's office by special arrangement with the preceptor and by approval and arrangement through the coordinator of electives for the Pediatric Department. A setting should be selected which will provide the student with a wide range of pediatric experience.

PED 504. Pediatric Clerkship at Gracewood.
A one-month elective with participation in in-patient care, out-patient care, conferences and seminars, all related to the multidisciplinary problems of the mentally retarded.

PED 508. Pediatric Cardiology.
This course offers experience in the study of congenital and acquired heart disease with emphasis on the clinical manifestations and findings. Correlation of the anatomic malformation with the physiologic alterations are emphasized. Research interests may be developed or continued from previous related elective.

PED 509. Clinical Allergy and Immunology.
Students will participate in evaluation and management of patients with allergic disorders and suspected immunologic deficiency diseases. There is flexibility of emphasis, depending upon special interests of the student. Clinical experience is provided in MCG clinics and private physician's office.

PED 511. Pediatric Research.
(Special Elective)
This elective consists of research experience in selected areas of pediatrics through special arrangement with the pediatric staff.

PED 512. Pulmonary Vascular Impedance Studies.
The elective is designed to expose the students interested in research, an opportunity to get involved in such an activity. Physiologic studies are performed on dogs every week and the data analyzed by Fourier analysis. The instantaneous relationships of pressure and flow are studied in the pulmonary circulation.

PED 513. Substitute Pediatric Intern.
(Special Elective)
The pediatric substitute intern will serve as an active member (acting intern) of the pediatric housestaff under the supervision of the pediatric resident and a pediatric faculty member. The student will have the opportunity for progressive experience in in-patient, out-patient and newborn care.

PED 514. Scottish Rite-Northside Hospital—Clerkship.
The two students will be afforded room and board at the Scottish Rite Hospital. Teaching rounds will be made each morning in the hospital. The morning period will be spent seeing private office patients of a general pediatric nature. In the afternoon, the students will return to the hospital where one will be involved in working up medical in-patient admissions and the other will be working in the afternoon pediatric clinics. Students will be on call in the hospital every third night and every third weekend. While in the hospital, they will be covered by a surgical resident and they will be under no increased responsibility as compared to the Medical College rotations.

PED 515. Pediatric Genetics.
The student will participate in evaluation of out-patients and in-patients referred for genetic consultation. In addition, conferences, seminars and case reviews will be held to reinforce the clinical teaching. When not directly involved with patients, the student may choose to work in the following laboratories: cytogenetics, metabolic screening, and biochemical genetics.

PED 516. Pediatric Clerkship at Columbus Medical Center.
This off-campus elective is conducted at the Columbus Medical Center. The elective can be arranged with major interest in neonatology, general pediatrics or a mix of both. Out-patient experience will be gained in the hospital clinics or a private pediatrician's office. There is flexibility of experience to meet the student's individual needs. Adequate time will be allowed for reading and/or individual research project.

PED 517. Pediatric Cardiology Research.
(Special Elective)
A special research elective in selected areas of pediatric cardiology through special arrangement with the pediatric cardiology staff.

ITD 502. Pediatric Neurology.
See course descriptions under Interdepartmental Courses.

Pharmacology

R. P. Ahlquist, Chairman; G. O. Carrier; G. W. Cross; W. F. Geber; D. C. Jerram; A. M. Karow; J. M. Kling; M. E. Logan; R. L. Longe; T. J. Mellinger; M. W. Riley; J. H. R. Sutherland.

PHM 301, 302, 303. Introduction to Pharmacology. (4-2-5 hours)
Lectures and laboratory exercises designed to survey the interactions between drugs and living systems. The emphasis is on chemicals and drugs used in the treatment of disease; what they do and how the body responds and disposes of them. Six hours lectures/laboratory per week.

PHM 311. Pharmacology for Dental Hygienists. (3 hours)
As a member of the health team, the hygienist may be called upon to use certain topical agents, take and understand a patient health history, acquire and inventory certain medications, and assist in cardiopulmonary emergencies. Major emphasis is on principles and dental therapeutic agents, but also includes drugs used medically.

PHY 501. Toxicology.
(Special Elective)
Prerequisites: PHM 551, 552, 553
Lecture and laboratory studies on aspects of toxicology including heavy metals, gasious poisons, industrial and agricultural chemicals, plants and venoms, and selected drugs. Treatment and selected case reports will also be included.

PHM 502. Adrenergic Pharmacology.
(Special Elective)
Prerequisites: PHM 551, 552, 553
An in-depth review of adrenergic drugs as applied to clinical medicine. Conducted as a participative discussion.

PHM 503. Preparation of Frozen Sperm, Blood and Other Tissues for Clinical Use. (1 month) (Special Elective) Didactic 20%; Laboratory 80%
Prerequisites: PHM 551, 552, 553

The student will learn how to freeze sperm and blood in such a way that the viability of the cells is maintained. The student will participate in the day-to-day operation of a clinical sperm bank. The student will read and discuss basic principles of cryobiology. The student will select other cells, tissues or organs on which to study in-depth the effects of freezing.

PHM 504. Clinical Pharmacology. (1 hour per week (Special Elective) per quarter)
Prerequisites: PHM 551, 552, 553

A cooperation elective presented by Department of Pharmacology and Section of Clinical Pharmacology and Hypertension (Dept. of Medicine). Presentation of clinical cases selected to illustrate appropriate and inappropriate use of drugs in patient management. Intended for junior and senior medical students and house staff.

PHM 551, 552, 553. Human Pharmacology. (4-0-4 hours)
Prerequisite: Second year standing in the School of Medicine

Objective is to provide the student with the necessary background to practice rational drug therapy. Emphasis is on the major classes of drugs and how they act in humans.

Physiology

R. Little, Chairperson; G. Bond; P. Dow; I. Ehrhart; J. Ginsburg; C. Hendrich; W. Hofman; W. Jackson; D. Miller; T. Nosek; T. Ogle; S. Porterfield; S. Stoney; R. Vargo; T. Wiedmeier.

PHY 210. Introductory Human Physiology. (5-0-5 hours)
Prerequisite: College Biology

The elements of human physiology with an introduction to the function of the major organ systems of the body, their interaction and control.

PHY 311. Principles of Human Physiology I. (5-0-5 hours)
Prerequisites: Inorganic chemistry, one physics course and a course in human anatomy (may be taken concurrently); or permission of the instructor

A two quarter sequence giving detailed coverage of the major organ systems of the body, their interactions and control. This will include lectures, demonstrations, discussion groups, and laboratory work as appropriate.

PHY 312. Principles of Human Physiology II. (5-0-5 hours)
Prerequisite: PHY 311

A continuation of Physiology 311.

PHY 501. Special Elective in Physiology.
Prerequisite: Student in School of Medicine

Lecture and/or laboratories studies in physiology. Topic, time and credit hours to be arranged.

PHY 550. Medical Physiology I. (6-2-7 hours)
Prerequisite: First year standing in School of Medicine

First of two quarter sequence presenting an intensive treatment of mammalian organ systems: the cell, electrophysiology; peripheral nerve and reflexes; muscle; and cardiovascular.

PHY 551. Medical Physiology II. (9-2-10 hours)
Prerequisite: PHY 550

A continuation of PHY 550, presenting respiration, body fluids and kidney, gastrointestinal and endocrine physiology.

PHY 590. Review of Human Physiology. (6-0-6 hours)
Prerequisite: Graduate standing in the School of Nursing or permission of the Department of Physiology

A review of human physiology emphasizing current concepts of organ function and their relationship to disease status.

ITD 550. Neuroscience. (7-4-9 hours)
Prerequisite: First year standing in School of Medicine

See course description under Interdepartmental Courses.

Psychiatry

E. J. McCranie, Chairman; E. Cook; M. Crouch; J. Danoff; P. Farr; W. Farr; G. Gazda; J. Hughes; K. Jones; G. Longley; G. Marshall; L. Marshall; E. W. McCranie; M. McCranie; J. K. McDonald; S. McGarity; C. Meyer; J. Poston; W. Quillian; R. Selby; M. Sell; B. Sisson; W. Sisson; F. Trest; S. Wiggins; G. Williams.

PSY 501. General Psychiatry Tutorial. (Special Elective)

This elective is flexible. It can vary from reading and discussion of psychiatric literature to more clinically oriented experience utilizing in-patients at TMH. Students may participate in ongoing didactic and clinical conferences in the department.

PSY 502. Clinical Clerkship—Fort Gordon. (Special Elective)

An individualized program with experience possible in all areas of psychiatric medicine based upon the needs and interests of the candidate, as determined by personal discussion with the Training Director of the Department of Psychiatry. Emphasis is placed on exposure of fundamental clinical problems in evaluation, diagnosis, and treatment. Potential areas of experience include: drug and alcohol abuse; in-patient psychiatric care; out-patient psychiatric medicine; child and adolescent, and family psychiatry; and, military and forensic psychiatry. The clerk is asked to discuss his experience, questions, and problems with the clinical psychiatrist supervising him in order to integrate and round out the clerkship.

PSY 503. Adolescent Psychiatry.
PSY 504. Adolescent Psychiatry.
This clerkship will provide experience with in-patient and out-patient adolescents.

PSY 505. Child Psychiatry.
PSY 506. Child Psychiatry.
Guided experience, reading and research related to the child (age 11 and under) having behavioral, learning or developmental difficulties will be provided.

PSY 507. Clinical Clerkship.
(Special Elective)
These clerkships provide supervised experience in the evaluation and treatment of people with a variety of psychiatric disorders supplemented by conferences and didactic instruction. These hospitals have extensive patient populations which permit the student to select particular areas of interest.

PSY 508. Psychotherapy and Other Modes of Treatment.
(Special Elective)
This elective will stress various therapeutic techniques including psychotherapy, drug and various organic therapies involving adults, adolescents and possibly children. Patients will be selected from the in-patient service on 3-North, psychosomatic patients from the consultive service, and the Aftercare Clinic.

PSY 509. Psychosomatic Medicine.
This clerkship will provide a continued and deeper experience with clinical problems similar to those in the Basic Medicine Clerkship. It will emphasize the consultation process and brief psychotherapy or psychosomatic cases.

PSY 510. Alcohol and Drug Abuse.
Varied clinical experience with drug and alcohol problems at several facilities; selected reading list, several psychiatrists and other disciplines will supervise the experience.

PSY 511. Off-Campus.
(Special Elective)

PSY 512. Sociological Research on Mental Illness.
Directed reading-discussion of research process in sociology as applied to understanding of the causation, development, recognition, and treatment of various forms of mental illness: problem formulation, research design, concept measurement, and data collection and analysis.

PSY 500. Basic Psychiatry.
This required clerkship will provide the student with intensive experience with psychiatric in-patients. With collaboration and guidance of the staff, he will do a complete work-up on assigned patients, including physical examination, mental status, and psychodynamic case formulation. He will then proceed with treatment with emphasis on supervised psychotherapy, including medication and other therapies as indicated. Scheduled June through May.

PSY 550. Behavioral Science.
This is a course designed to demonstrate to medical students some of the bio-psycho-social aspects of medical practice.

PSY 560. Psychiatry.
Introductory course to the basic principles of clinical psychiatry.

Radiology

W. Pool, Chairman; M. Brown; S. Burch; W. Carlton; T. A. El Gammal; C. Eubig; A. Fiveash; S. Freedman; C. Hall; J. Hanks; L. Hogue; J. Howington; J. Johnson; W. Kitchens; T. Lott; S. Reichard; S. Roberts; J. Strong; C. Teeslink; J. Trueblood; T. Vanderzalm; W. Wege; M. Wier.

RAD 501. Diagnostic Radiology.
Instruction in clinical diagnostic radiology is provided by participation in fluoroscopic, special procedures and reporting of studies performed in the department. Radiation protection, basic radiobiology, nuclear medicine and oncology, with emphasis on the place of radiation therapy are parts of the elective. There are daily teaching sessions with members of the staff as well as interdepartmental conferences with medicine, surgery, pediatrics, medical chest, and neuroradiobiology.

RAD 502. Radiobiology.
(Special Elective)
Effects of ionizing radiation on biological systems. Introduction to radiobiology, radiation hazards, and protection. Lectures and research participation.

RAD 503. Radiobiology.
(Special Elective)
The biological basis for radiation therapy. Seminar and research projects.

RAD 504. Advanced Clerkship in Diagnostic Radiology.
(Special Elective)
This clerkship will consist of more advanced instruction in diagnostic radiology. The possibility is opened to "subspecialize" in areas such as neuro-radiology, the G.I. tract or pediatric radiology. Assignments in didactic as well as the service responsibility in the assigned area will be part of the clerkship. The student will report selected cases after preview by one of the staff. He will participate in planning some of the inter- and intra-departmental conferences. There is a possibility of taking part of this elective at the VA, Fort Gordon, or the University Hospital.

RAD 505. Off-Campus Elective.
(Special Elective)
Special arrangements can be made for elective periods of one to three months in the Department of Radiology at other medical schools.

RAD 506. Radiology Preceptorship.
(Special Elective)
The elective will work closely with a private radiologist in his office as well as hospital locations. He will be assigned specific reading assignements related to patients that are studied during the day.

RAD 506A. Radiology Preceptorship.
(Special Elective)

The elective will work closely with a private practitioner in his office as well as University Hospital. He will be assigned specific reading assignements related to patients that are studied during the day.

RAD 507. Clerkship in Radiation Therapy—Oncology.

The student will be afforded an opportunity to see a large variety of tumors treated with various modalities of radiation therapy. He will participate in tumor conferences at the various hospitals and also attend the radiation therapy cancer clinics at the Talmadge and University Hospitals. He will get experience in the work-up and general management of the cancer patient in the areas of curative therapy, palliation, and supportive care.

RAD 508. Clerkship in Nuclear Medicine.

The student will be offered the opportunity of participating in the daily activities of the Nuclear Medicine Section and will attend daily intra-departmental conferences and weekly intra-departmental conferences. He will gain experience in the use of nuclear medicine procedures in the diagnosis and treatment of disease processes.

RAD 509. The Business Aspects of Medical Practice.
(Special Elective) (1 month)

The course is intended to acquaint the student with the problem areas frequently encountered in opening a new medical practice, and whose advice and counsel to seek when such problems are encountered in the business management area. Current trends in the health care climate will also be examined.

Surgery

A. Mansberger, Chairman; H. Adams; M. Allen; J. Armstrong; E. Berg; N. Bhatti; S. Blalock; T. Blanchard; F. Bliven; T. Bowden; M. Bridges; J. Christian; G. Clayton; M. Collins; G. Doetsch; T. Edmondson; M. Elliott; L. T. Ellison; R. Ellison; N. Elsahy; H. Engler; C. Esquivia; R. Finney; W. Flanagin; A. Franceschi; R. Galloway; A. Gindin; R. Gongaware; F. Haar; W. Hammer; E. Howard; A. Humphries; C. Jelenko; W. Jennings; R. Johnson; E. Joy; A. Karow; J. M. Kling; W. Love; W. Lucas; H. Marble; J. McPherson; H. Moore; W. Moretz; S. Naidu; R. Nesbit; R. Parrish; H. Pinson; E. Porubsky; N. Quantz; C. M. Rhode; J. Rubin; E. Saunders; P. Scardino; R. Schilling; R. Schoffstall; R. Shimp; A. Smith; R. Smith; J. Still; D. Sullivan; G. Thurmond; D. Tucker; H. Wheeler; D. Williams; J. Winburn; R. Witherington; W. Wolff; C. Wray.

SUR 500. Basic Clerkship in Surgery.

This eight-week course is the basic course required of all students and is the prerequisite for many surgical electives involving contact with patients. Instruction includes basic concepts of emergency medicine and anesthesiology. Students are assigned patients for total patient care participation, including complete write-ups and participation in operative procedures. They take part in ward rounds, conferences, tumor conferences, journal club, seminars and informal discussions. Student activities involve both in-patients and out-patients. Scheduled June through May.

SUR 501. Clerkship.

Consists of working with patients, residents and faculty in pre-operative, intraoperative and postoperative care, participating in all regularly scheculed teaching, patient care and research conferences of general surgery.

SUR 502. Research Elective.
(Special Elective)

An area of mutual interest to the student and his supervisor will be selected and the student will outline his research project, carry it out under supervision and submit to his supervisor a satisfactory report of his work toward the end of the project. For some projects, students will undertake the project singly; in others, in pairs. Projects may be undertaken in the Experimental Surgery Laboratory or in the Clinical Research Wing and an occasional project may involve the use of Clinical Hospital Records.

SUR 503. Dog Surgery.

Consists of morning sessions of seminar discussions of anatomy, physiology and clinical coordination with the operative procedures performed during the afternoons. Emphasis is placed on surgical technique and each student will perform 5 operations as well as function as first assistant, scrub nurse and anesthesiologist.

SUR 504. Tutorial.
(Special Elective)

Individual students may elect to study in depth, for a period of one to two months, any specific area in surgery under the guidance of the faculty member most familiar with that specific area. A thesis or report on the subject chosen is a necessary part of this elective. No student is eligible for more than one such elective.

SUR 505. Preceptorship.
(Special Elective)

Clinical experience with individual private preceptor, in his office, operating room and hospital. (Individual arrangements must be made through both the chairman of Surgery and the clinical surgeon involved.)

SUR 506. Off-Campus Experience.
(Special Elective)

Students may elect off-campus experience in some phase of surgery in some other medical school or institution for a period of one to two months. For help in making arrangements, interested students should contact the Medical College of Georgia counterpart of the individual at the other institution with whom he wishes to work. Such electives must be an identifiable course of instruction. An evaluation of the student's performance will be required. No student is eligible for more than one such elective.

SUR 507. Kidney Transplantation.
SUR 508. Kidney Transplantation.

Students will assist with care of post-transplant patients and pre-transplant patients.

SUR 509. Emergency Room Clerkship.

This clerkship offers active participation in the care of patients in the University Hospital Emergency Department. Students can expect to gain experience in the rapid assessment of acutely ill and injured patients. The schedule will be arranged on a rotating basis to provide approximately 180 hours of active involvement in the care of emergency patients.

SUR 510. Surgery Clerkship, General Surgery. (Special Elective)

The student will be assigned to a surgical floor where he will see, evaluate and scrub on surgical cases under the direct supervision of a surgical resident and the Chief of Surgery. The student will attend all surgical conferences, ward rounds and surgical out-patient clinics, and will be expected to actively participate in all areas. Night call will be every third night and every third weekend.

SUR 511. Surgery Clerkship, Emergency Room. (Special Elective)

Students will be assigned for 8 hour shift and will be under direct supervision of 8 full-time E.R. physicians. They will be expected to see, evaluate and suggest emergency treatment of patients. They will also be encouraged to follow patients who are admitted by scrubbing with the surgical residents or attending physician when appropriate. They will also be expected to attend all those teaching conferences which do not conflict with emergency problems in which they may be involved.

SUR 512. Advanced Clerkship at Savannah Memorial Hospital. (Special Elective)

Advanced surgical clerkship in general surgery. Basically a sub-internship. Includes work-up of patients, clinics, rounds, conferences, lectures, some closely supervised surgical experience. Teaching by Medical College of Georgia affiliate faculty and residents.

SUR 513. Substitute Internship. (Special Elective)

Students on this elective should function as substitute interns on the General Surgical Services at the Medical College of Georgia Hospitals. Students are not advised to take this elective unless there is a vacancy in the schedule, since overstaffing would dilute the experiences available. The student will be assigned to a specific surgical service and will function as an integral part of that service. The student would be expected to initiate the clinical data base, begin diagnostic measures, and where possible, to perform surgical procedures with supervision. In addition, he will participate in the teaching responsibilities, conferences, clinics, and operating experiences of the service to which he is assigned and will be assigned night call responsibilities.

SUR 514. Clinical Management of the Critically Ill/Burned Patient.

The student will be involved in the care of selected burned patients. Such involvement may comprise all phases of management. Patients will be selected such that help crystalize and offer opportunities for establishing new information in anatomy, pathophysiology, biochemistry, pharmacology, and microbiology as these apply to the critically injured. The gamut of total systematic bodily derangement will be examined by studying and involving in the course of these patients. Selected reading, didactic presentations, preceptoral instruction, and clinical interface will be the principle methodology employed. The student will be entered into the basic, intermediate or advanced category based upon previous experience and knowledge base.

SUR 520. Neurosurgery Clerkship.

This externship provides opportunity for combining the direct patient care responsibilities of a junior house officer with practice in performing neurological examinations while participating with staff members in the practice of neurosurgery. The extern will be assigned five to eight patients for which he will have primary responsibility for daily care under the supervision of the senior house officer and staff of the Neurosurgery Service. He will participate in patient evaluations in the clinic and in daily teaching conferences. This elective provides for a close working relationship between the staff and the student while at the same time providing opportunity for patient care responsibilities.

SUR 521. Neurosurgery Research Elective.

The purpose of this elective is to enable students to pursue research in the field of neurosurgery. The actual project may be one initiated by the student or the student may elect to participate in an ongoing research project of one of the faculty members. Thus, this elective will have to be arranged on an individual basis with the particular faculty member to satisfy the needs of the students and to be sure facilities are available.

SUR 523. Neurosurgery Preceptorship.

The purpose of this elective is to provide an opportunity for those students who wish to study neurosurgery at some other institution. This may be desirable because the student is already taking another elective at the institution or because he plans to settle in that region or because there is a particular type of neurological surgery being done there that the student is interested in.

SUR 525. Neurosurgery Elective at the University Hospital.

This elective offers the student a choice of one or two inroads into the specialty of neurological surgery. Firstly, it allows him to become acquainted with the general idea of what neurological surgery is. This is accomplished by the student's making ward rounds daily with the resident and the attending as a unit. Here, he gets a general idea of the major problems involving the brain and spinal cord. As a continuation of this idea, the student, with the attending physician, observes diagnostic studies performed in X-ray such as myelography, arteriography and pneumoencephalography. A natural continuation down this road is the student's participation in the surgical suite as a first or second assistant. The second road into the specialty gives the student a chance for a more in-depth penetration, if he so desires, into the radioisotope field as it involves neurosurgery or into the field of neuroradiology and even neuropathology. The student attends a neurological surgery conference once a week in which all of the preceding problems are discussed. The student, thus, is a welcome member of the neurosurgical team.

SUR 530. Ear, Nose, Throat.

This clerkship is designed to familiarize the student with diseases of the ears, nose and throat with emphasis on physical examination of the head and neck, radiology

of the head and neck, audiometrics, and treatment of common ENT diseases. The student will also be introduced to the principles of head and neck surgery, facial plastic surgery, endoscopy and neuro-otology.

SUR 531. Otolaryngology Surgery.
This clerkship is designed to familiarize the student with the diseases of the ears, nose and throat with emphasis on diagnostic techniques, including physical examination techniques, radiology, audiometrics and endoscopic procedures. The student will be introduced to the principles of head and neck surgery, facial plastic surgery, endoscopy and neuro-otology. The utilization of the office and hospital patients will allow the student to participate in and observe the specialty of otolaryngology.

SUR 541. Orthopedics Clerkship.
Arranged through Faculty Coordinator.

SUR 542. Orthopedics Research Elective.
(Special Elective)
Arranged through Faculty Coordinator.

SUR 543. Orthopedics Tutorial.
(Special Elective)
Arranged through Faculty Coordinator.

SUR 544. Orthopedics Preceptorship.
Augusta Private Office or Fort Gordon or Emergency Room at University Hospital.
(Special Elective)
Arranged through Faculty Coordinator.

SUR 545. Orthopedics Off-Campus Experience.
(Special Elective)
Arranged through Faculty Coordinator.

SUR 546. Hand Surgery.
(Special Elective)
Arranged through Faculty Coordinator.

SUR 551. Pediatric Surgery.
Pediatric Surgery Elective is offered to those completing the surgery core. Designed to introduce the student to the fundamentals involved in the clinical care of the pediatric surgical patient.

SUR 561. Thoracic and Cardiac Clerkship.
This elective is designed to provide additional experience in pathophysiology and treatment of intrathoracic disease. The student participates with the chief resident and/or attending thoracic surgeon in answering consultations regarding patients with potential thoracic surgical problems on other services. In addition, opportunities are available for experience in treatment of critically ill patients in the surgical intensive care unit. Responsibility of the student are entirely separate from those taking in the required clerkship (SUR 500).

SUR 562. Thoracic and Cardiac Surgery Research Elective.
This elective is designed for a student who has an interest in research or an interest in a particular clinical intrathoracic problem. A research goal or project may be determined by discussion with a member of the Thoracic and Cardiac Surgery staff. This might consist of a pilot laboratory project or analysis of clinical cases. A paper describing the research project and results would be required.

SUR 563. Thoracic and Cardiac Surgery Preceptorship.
Arrangements may be made for a student to work with a private thoracic-cardiac surgeon off-campus or at another medical school to provide a student with additional experience in this field. This would provide a student an opportunity to observe methods of treatment of patients in hospitals other than TMH.

SUR 571. Urology Clerkship.
A 4-week patient care elective in general urology which can be taken at TMH (maximum 4 students) or Dwight David Eisenhower Army Medical Center, Fort Gordon, Georgia (2 students). Emphasis is on evaluation of the urologic patient, both in-patient and out-patient. Students have opportunity to assist on cystoscopies and several operative procedures. Opportunity to learn proper technique for urethral dilations, urethral catheterizations and prostatic evaluation is available. Students are assigned in-patients in rotation and perform histories and physical examinations upon them and then follow the patient daily including pre-operative, operative and postoperative care. Faculty, residents and students make ward rounds and review all urologic X-rays daily. Informal conferences with faculty and/or residents are held covering the topics G.U. malignancies, urolithiasis, prostatic disease, neurogenic bladder and complications of the catheter.

SUR 572. Urology Preceptorship.
(Special Elective)
A 4 to 8 week elective which may be taken at MCG or any other approved teaching institution where a suitable preceptor can be found. Emphasis is on a clinical or laboratory research project. The scope of this course is broad and can include patient care or not. The student is expected to complete his chosen project and report upon it orally or in writing at the end of the elective period.

SUR 573. Urology Off-Campus Experience.
(Special Elective)
A 4-week patient care off-campus elective which can be taken with a qualified urologist anywhere. The course content should about parallel SUR 571.

SUR 581. Plastic Reconstructive Surgery.
The Plastic and Reconstructive Surgery Service is a clinical service involved with evaluation and management of wound healing problems, repair of nerves, tendons, vessels and bone and incorporating clinical material including tumors of the head and neck, injuries of the extremities, thermal burns and congenital abnormalities. The elective may be taken as a one month rotation to include participation in ward rounds, clinics and in the operating room.

SUR 582. Plastic Reconstructive Surgery Off-Campus Experience.
(Special Elective)
The Plastic and Reconstructive Surgery Service is a clinical service involved with evaluation and management of wound healing problems, repair of nerves, tendons, vessels and bone and incorporating clinical material including tumors of the head and neck, injuries of the extremities, thermal burns and congenital abnormalities. The elective may be taken as a one month rotation to include participation in ward rounds, clinics and in the operating room.

nursing

Dean—Dr. Neila S. Poshek
Associate Dean for Continuing Education—Susan Bruno
Associate Dean for Undergraduate Programs—Preston L. Davidson
Associate Dean for Curriculum Development—Leilee P. Ault

School of Nursing

The School of Nursing Philosophy

We, the faculty of the School of Nursing, Medical College of Georgia, believe that nursing is a dynamic force in the health care of all people. The changing health care system requires leadership in nursing which can respond to the needs of clients and to the evolving profession. Since the community of man encompasses many cultures, health care, if it is to be effective, must reflect the diversity of cultural values in modern society. We believe that effective health care requires the participation of well informed consumers and that nursing, as well as other health professions, shares in the responsibility for educating the general public for this role.

Contemporary nursing is predicated on the concept of caring and takes into account the relationship between the life styles and the health status of its clients. Caring, as the essential function of professional nursing, is defined as respect and concern for the clients' optimum levels of wellness, maintenance of their lifestyles in all areas except those aspects which must be modified or adapted for thereapeutic purposes, and their encounters with pathophysiological-psychological illnesses.

We believe that humans are holistic beings, ecological systems that are greater than and different from the sums of their parts; that all man's life processes are geared to manifest the integrity of the organism and that nothing affects any aspect of man without affecting the whole. We believe that nursing is a science and an art. The basic sciences from which nursing science is derived are not holistic in their outlook. The art of nursing, focusing on human behavior and the interactive processes of roles and functions, is holistic in outlook. Nursing practice overcomes this apparent dichotomy through its organismic response to the holistic nature of clients.

We believe that dynamics of change affect all areas of life. Change affects the nursing student, the practicing professional and the nursing educator. The client and the members of his support systems are affected by change. The society or milieu, in which clients and professional practitioners function is constantly undergoing change. Thus the processes and theories of change must prevade all aspects of nursing.

We believe the practice of professional nursing encompasses many roles which evolve in response to the changing health care needs of society. The assumption of any nursing role requires competency in practice and commitment to the direct care of clients. The delineation of these roles must rest upon a foundation of nursing theory, nursing research and a commitment of the professional practitioner to continuous learning as a concomitant of competent practice.

Modern technology and reinterpretation of traditional beliefs concerning human life are forcing health professionals to examine value systems. The profession of nursing recognizes the moral and ethical dimensions of nursing practice and must provide support for its individual members who ultimately make the decisions about their own professional practice and who accept accountability for those decisions.

The faculty views education as a process of self-fulfillment which contributes to the mutual growth of the learner and the teacher. The shared search for knowledge and the discovery of application of this knowledge is the basis for a junior-senior colleagueship.

We believe there are many paths of learning which may lead to the achievement of common educational goals. Therefore, the curriculum must reflect alternative approaches toward education. Diversity in entry behaviors, learning styles, individual career goals and commitments necessitate a curriculum responsive to this diversity. We believe the implementation of a curriculum requires the utilization of individually planned learning experiences if maximum learning is to occur.

We believe nursing education is derived from the needs of contemporary nursing practice. This practice rests on a foundation of nursing theory and nursing research and on the unique application of theories and knowledge drawn from other disciplines. Nursing education must build on the student's pre-existing knowledge base to enable him to attain the highest level of preparation consistent with his goals and abilities. Nursing education must provide the opportunity for students to develop the skills needed in the synthesis of knowledge for the contemporary practice of nursing. Included in these are research skills to advance professional knowledge and practice, skills in planning and implementing change and skills in the exercise of professional leadership.

We believe that the educational process encompasses a thorough study of health care delivery systems as they exist and as they evolve. Education must prepare the professional nurse to identify

new and innovative roles for nursing in the delivery of health care and for the legal accountability inherent in these roles. We view these roles as requiring a contemporary professional practitioner who utilizes independence of judgment, interdependence in problem-solving and collaboration in implementation.

We believe nursing education must enable the professional nurse to relate to the client in health and illness, in whatever setting he may be found and to recognize and protect the rights of the client to participate in determining his health care. Nursing education must enable the professional practitioner to have the knowledge and ability to provide leadership in influencing changes in the health care system when necessary to meet the client's needs as they exist today and as they emerge in the future.

We believe an educational program designed to prepare professional practitioners of nursing must provide a forum in which students may explore the moral and ethical issues which are inherent in health program decisions.

We believe that these philosophical statements require the continual development of curriculum patterns which can maintain contemporaneity in responding to the changing needs of society, the profession and the learner.

Finally, we believe that the educational program should assist the student in achieving the goals of being a competent practitioner, being a knowledgeable member of the profession, and being a constructive contributing member of society.

Objectives of Baccalaureate Nursing Program

Upon completion of the Baccalaureate Nursing Program, the student will be able to:

1. Apply the nursing process to meet the health needs of clients, utilizing the concepts of caring, stress adaptation, maturation-learning, and leadership.
2. Utilize theoretical and empirical knowledge from the physical and behavioral sciences and the humanities as a source for making nursing practice decisions.
3. Utilize principles of research in collecting data, analyzing nursing interventions and generating hypotheses to refine his own nursing practice.
4. Utilize principles of management in planning nursing care, evaluating health care and planning methods for implementing change to improve delivery of health care.
5. Collaborate with citizens and members of the interdisciplinary health team to provide protective, nutritive and generative health care in individuals, families, groups and communities.
6. Evaluate roles of the professional nurse and analyze factors which contribute to changing roles.
7. Demonstrate leadership and responsibility in nursing practice which are consistent with professionalism.

Objectives of the Graduate Program

Upon completion of the Graduate Program, the student will be able to:

1. Demonstrate a synthesis of the concepts of caring, stress-adaptation, maturation-learning, and leadership by using them within the context of the nursing process.
2. Select and adapt nursing and other theories in the practice of nursing, teaching, and administration.
3. Design and use models in the practice of nursing, teaching, or administration.
4. Generate hypotheses and design a research investigation which could enhance nursing practice and expand nursing knowledge.
5. Use and test new information and techniques gained from research, literature, and colleagues in one's respective area of specialization.
6. Evaluate nursing practice decisions on the basis of:
   (a) theoretical and empirical knowledge from the physical and behavioral sciences and the humanities;
   (b) feedback from the client systems.
7. Initiate collaborative relationships with clients and health care providers in planning, implementing and evaluating health care delivery.
8. Use physical, human, and financial resources to influence individuals and social systems to bring about optimal health care and to facilitate positive growth and change in client systems.
9. Develop leadership roles based on the authority of one's knowledge, communication skills, and ability to use research methods.
10. Define, delineate, and implement the role of a clinical, teaching, or administrative specialist.
11. Critically evaluate the quality and effectiveness of one's own performance in nursing

practice, education, or administration using contemporary standards, research methods, and feedback from client systems and other sources.

12. Design and implement ways to meet one's own professional development goals based on individual needs, social trends, and nursing's many dimensions.
13. Monitor the nursing profession and influence its direction by:
    (a) creating a support system for self and colleagues to facilitate the attainment of goals and potentials;
    (b) becoming a client advocate;
    (c) contributing to professional and legislative policy-making processes.
14. Develop and delineate a personal philosophy of nursing and practice nursing, teaching, or administration in a way that maintains congruency, consistency, and integrity within one's philosophical commitment.

Scholastic Eligibility Standards

See Academic Probation and Suspension in the General Information section of this *Catalog* for undergraduate scholastic eligibility standards.

Students in the graduate programs of the School of Nursing must maintain a cumulative GPA of 2.89 for work done at this institution. Whenever a student shall fall below this average, he/she shall be on academic probation (and shall be subject to suspension). No student may graduate with an MCG cumulative GPA of less than 2.89.

Non-Academic Exclusion

Any student may be denied permission to continue enrollment in the School of Nursing if in the opinion of the faculty, the student's knowledge, character or mental or physical fitness cast grave doubts upon his/her potential capabilities as a nurse.

Advancement Examinations

The policy governing achievement examinations shall be posted in the School of Nursing; students will meet requirements of courses and achievement examinations according to current policies. Taking the NLN Baccalaureate level achievement tests are promotion and graduation requirements. Courses are to be taken in sequence. Exceptions must have the approval of the dean. According to current policy, successful completion of certain general exams and subject exams offered through CLEP and USAFI may be accepted for credit.

Examinations on the History and Constitutions of the United States and Georgia

Examinations on these subjects are required of all students unless exempted by a presentation of course credit dealing with these constitutions and histories. A student is advised to meet this requirement early in the academic career. CLEP exams do not meet these requirements.

Accreditation

The School of Nursing is accredited by the National League for Nursing and is a member agency of the Department of Baccalaureate and Higher Degree Programs.

The program is also approved by the Board of Examiners of Nurses for Georgia. Graduates are eligible to take the state licensing examination, successful completion of which entitles the nurse legally to practice nursing and to use the title "Registered Nurse" (R.N.).

Facilities, General Education and Professional

The general facilities of the Medical College combined with those of Augusta College, offer excellent opportunities for a balanced program of liberal and professional education.

In addition to facilities for instruction as listed in the General Information of this *Catalog,* the School of Nursing utilizes other agencies as necessary: Gracewood State School and Hospital, Veteran's Administration Hospitals, University Hospital, Augusta Regional Hospital, industries, nursing homes, day and nursery schools, and other agencies selected on the basis of their contribution to the student's understanding of continuity of patient care and total health planning.

Admission Requirements

In addition to general requirements of the college, applicants must meet the following: (see programs for special requirements)

Age

The minimum age is 16 for admission to the freshman year of the School of Nursing as required by the Board of Examiners of Nurses for Georgia.

Personal Interviews

B.S.N. Program: May be arranged at the discretion of the student and/or faculty.

Graduate Program: Required.

Academic Criteria

Preference will be given to the applicant who has demonstrated superior academic ability. The applicant must present evidence of graduation from an accredited high school or its equivalent (a state high school diploma based on general educational development). In addition, all applicants to the Undergraduate Programs must present transcripts showing completion of the requirements of the core curriculum of the University System of Georgia. These requirements are:

Area I—English and Humanities:	**Quarter Hours**
English Composition	10
Humanities (speech, art, language, music, philosophy, literature, etc.)	10
Area II—Natural Sciences	
A two quarter Natural Science sequence with laboratory (biology, physical sciences, etc.)	10
Mathematics	5
Elective (microbiology, biology, math, physics, chemistry, zoology, etc.)	5
Area III—Behavioral and Social Sciences	
Introductory Sociology	5
Introductory Psychology	5
*American History	5
*American Government	5
Area IV—Major Support	
Educational Psychology	5
Human Growth and Development, sociology, anthropology, criminology, etc.	5
Anatomy and Physiology	10
Electives in Natural Science	5
Microbiology or Chemistry	5

These criteria are subject to change. Prospective applicants are advised to keep up-to-date on these academic criteria by contacting the School of Nursing on a periodic basis.

*These courses, taken in any unit of the University System of Georgia meet legislative requirements for proficiency in U.S. and Georgia history and U.S. and Georgia constitutions. Applicants who present courses other than the above to meet history requirements (10 quarter hours), may attenpt to meet the legislative requirements by examination. The legislative requirements must be met before graduation.

Transfer Credit

Transfer of all general education credit to meet core curriculum requirements is mandatory. No F grades are transferrable. A grade of D in English is not transferrable. Other D grades may be transferred only at the discretion of the School of Nursing. Applicants transferring general education credit not earned in a unit of the University System of Georgia must meet the general requirements of the Core Curriculum of the University System of Georgia.

Application Procedure

Application forms with instructions for completing the admission procedure may be obtained from the Office of Academic Admissions. Application for each entering student must be filed completed (including all transcripts and other admission requirements) no later than May 1st for the Fall Quarter admission. Early application is encouraged.

Transcripts from all high schools, colleges, or other educational institutions are part of the application and are necessary to determine admission eligibility. CEEB-SAT scores must be submitted and should either be requested from Educational Testing Services or should appear on the student's college transcripts.

The School of Nursing does not have an "open admissions" policy. All applications received and completed before the stated deadlines are given careful consideration; however, not all applicants are admitted. Admission is dependent upon a number of factors including CEEB-SAT scores, high school or college grade point averages, and availability of space, facilities and faculty. Priority for admission is given to residents of the State of Georgia.

Applicants to the Registered Nurse Degree Completion Program must submit evidence of current registration (any State, Territory, Commonwealth, or District of Columbia) to be eligible for admission. Applicants must also have one year of work experience as an R.N.

Admission to all *Undergraduate* programs, including MCG-SONAT (Athens) is for Fall Quarter only.

Registered Nurse applicants for the Degree Completion Program ("Pathways") must submit college transcripts showing satisfactory completion of all coursework required in Areas I, II, and III and at least three courses in Area IV of the Core Curriculum of the University System of Georgia. Remaining coursework in Area IV may be completed by registered nurses while enrolled as a Medical College of Georgia student. *Admission priority will go to RN applicants who have completed all core curriculum requirements.*

Satisfactory scores on tests (General or Subject) of the College Level Examination Program may be submitted for credit in lieu of coursework to meet some specific requirements of the Core Curriculum of the University System of Georgia. Applicants or enrolled students who plan to use credit by examination to meet course requirements must do so within the provisions of the current policies of the institution and the school. See General Information Section—Credit by Examination.

Fees and Expenses

See the General Information section of this *Catalog* for matriculation and other general fees. Estimated fees and expenses per academic year pertaining to Nursing students are:

	First Year	Second Year	Third Year	Fourth Year
Books and supplies	$130	$130	$130	$130
Uniforms	—	200	—	—
*Housing	330	330	330	330
Food	600	600	600	600
Personal (laundry, entertainment, travel, etc.)	450	450	450	450

*See the General Information section for the cost of various on-campus housing options. For hospitalization and life insurance costs, also see the General Information section. Fees and expenses are subject to change without notice.

Financial Aid and Employment Opportunities

The Student Financial Aid Bulletin may be obtained by writing to the Financial Aid Office. A limited number of part-time employment opportunities are available through the Personnel Office.

Students may enroll in the student Army or Navy Nurses Corps beginning with either the junior or senior years.

An application form on which you may apply for any of the other programs listed in the brochure may be secured by writing the Financial Aid Office.

Student Organizations and Activities

Students in the School of Nursing participate in the activities and organizations of both the Medical College of Georgia and Augusta College.

An Honor Society was organized in 1969. It was chartered as a local chapter (Beta Omicron) of Sigma Theta Tau in 1973.

In addition to the regular activities at the college, students in Nursing may belong to class organizations and the Student Nurses Association.

Undergraduate Curricula

A. Four-year generic curriculum, Augusta campus applicants may enter the MCG School of Nursing their freshman year, complete all general education requirements (freshman and sophomore years) at Augusta College and MCG, and then be eligible for entrance into upper division courses in nursing as described below.

B. Two-year upper division generic curriculum, Augusta campus. Upon completion of all general education requirements, either through MCG and Augusta College or by transfer from other colleges, applicants enroll in the following curriculum pattern:

First Year

Fall Quarter		Quarter Hours
NSG 322	Nursing Process	5
NSG 333	Mental Health-Psychiatric Nursing I	5
NSG 349	Introduction to Family Nursing	5
		15

Winter Quarter		Quarter Hours
NSG 334	Mental Health-Psychiatric Nursing II	5
NSG 318	Epidemiology	5
NSG 345	Adult Nursing I	5
		15

Spring Quarter		
NSG 490	Introduction to Clinical Nursing Research	5
NSG 351	Family Nursing I	5
NSG 346	Adult Nursing II	5
		15

Second Year

Fall Quarter		Quarter Hours
NSG 417	Community Health Organization	5
NSG 453	Trends in Nursing	5
NSG 347	Adult Nursing III	5
		15

Winter Quarter		
NSG 419	Family Health Services	5
NSG 352	Family Nursing II	5
NSG 489	Introduction to Management in Health Care Delivery	5
		15

Spring Quarter		
NSG 494	Practicum in Professional Nursing	15
	Total	90

C. MCG-SONAT. This two calendar year (6 quarter) upper division B.S. in Nursing program is offered at the Medical College of Georgia School of Nursing in Athens, Georgia. Admission requirements are graduation from an accredited high school or equivalent, completion of 90 quarter hours of the core curriculum with an acceptable grade point average, acceptable CEEB-SAT scores, and demonstrated academic ability.

This is a satellite program directed and taught by a coordinator and faculty of the MCG School of Nursing. Students are committed to six quarters of sequential study (Fall, Winter, Spring). Admission is in the Fall Quarter only. This program is essentially the same upper division nursing program offered on the Augusta campus. Major clinical laboratory experiences are obtained at St. Mary's Hospital and at Athens General Hospital as well as in many community agencies.

Application *cannot be made* to the University of Georgia for admission to this program. All accepted students enroll as Medical College of Georgia students and, upon successful completion of the program, will be awarded the Bachelor of Science in Nursing degree from the Medical College of Georgia.

*Two-year upper division generic curriculum, Athens campus:

First Year

Fall Quarter		Quarter Hours
NSG 311	Perspectives in Contemporary Nursing	5
NSG 312	Introduction to Nursing Process	5
NSG 313	Nursing Role: The Emerging Family	5
		15

Winter Quarter		
NSG 314	Nursing Role: The Maturing Family	5
NSG 362	Nursing Role: Deviations from Wellness I	5
NSG 306	Scholarly Investigation in Nursing	5
		15

Spring Quarter		
NSG 372	Nursing Role: Deviations from Wellness II	5
NSG 373	Nursing Intervention I	5
NSG 316	Leadership in Contemporary Nursing	5
		15

Second Year

Fall Quarter		Quarter Hours
NSG 442	Nursing Role: Deviations from Wellness III	5
NSG 424	Nursing Role in Health Care Systems	5
NSG 443	Seminar and Practicum in Contemporary Nursing I	5
		15

Winter Quarter		
NSG 452	Nursing Role: Deviations from Wellness IV	5
NSG 425	Realities in Contemporary Nursing	5
NSG 444	Seminar and Practicum in Contemporary Nursing II	5
		15

Spring Quarter		Quarter Hours
NSG 462	Nursing Roles in Crises	5
NSG 446	Nursing Intervention II	5
NSG 445	Seminar and Practicum in Contemporary Nursing III	5
		15
	Total	90

*The above courses are offered on the Athens Campus. Course descriptions are available upon request at the School of Nursing.

Registered Nurse Degree Completion Program

Admission to this program is limited to currently licensed registered nurses. For 1977 entering students the program is a sequence of nine courses specifically designed for the R.N. student (hospital diploma or associate degree graduate) attempting to complete requirements for the Bachelor of Science degree in nursing. Admission to the program is Fall Quarter of each year. Minimum time in residence is three academic quarters (Fall, Winter, and Spring). Courses taken in MCG off-campus centers apply to the residency requirements. The program is as follows:

Fall Quarter		Quarter Hours
NSG 480	(Course being developed)	5
NSG 481	Perspectives in Professional Practice	5
NSG 482	Nursing in Changing Health Care Systems	5
		15
Winter Quarter		
NSG 483	The Nurse as a Scholar	5
NSG 484	Collaboration, Negotiation and Compromise	5
NSG 485	Principles, Power, Politics and Policy	5
		15
Spring Quarter		
NSG 486	Nursing	5
NSG 487	(Course being developed)	5
NSG 488	(Course being developed)	5
		15
	Total	45

The nine nursing courses listed above must be taken. No transfer, equivalency or credit by examination is allowed for these. In addition, students may take one or two electives each quarter as needed to meet the 180 quarter hour graduation requirement. This is an institutional residency requirement of 45 quarter hours. Except for equivalency credit granted for nursing in hospital diploma or associate degree programs, and the nine course sequence in nursing, R.N. students must meet the same graduation requirements as all other candidates for the B.S.N. degree.

Registered Nurses applying for admission for the Fall, 1978 class will be permitted to challenge basic nursing courses by examination. Achievement on these challenge examinations will determine the level of advanced placement in the B.S.N. curriculum. Individuals who are not successful with one or more challenge examinations will be required to take coursework as appropriate. Equivalency credit for hospital diploma nursing programs and Associate Degree nursing programs will no longer be granted. Additional details of the R.N. degree completion program for 1978 will be published in the *Catalog* supplement of July 1, 1978.

Master of Science in Nursing

The usual period of time for completion of this degree is 4 consecutive quarters or one calendar year of full-time study (15 quarter hours per quarter). Students are accepted Summer and Fall quarters only (SAVSAT, Fall Quarter only).

The School of Nursing offers a "summers only" curriculum for nurses interested in the teaching specializations. This program is limited to those persons interested in preparing to be teachers in nursing education programs (Augusta campus only).

Sixty quarter hours of credit is required for the MSN degree with 30 hours in nursing courses and approximately 30 hours in general education coursework. The policy of the School of Nursing permits a student to transfer in fifteen quarter hours of credit in the general education courses, providing the coursework fulfills the requirements as set forth in the curriculum. Any student desiring to take coursework elsewhere preparatory to enrolling at MCG should do so with advisement from the Associate Dean, Graduate Programs in Nursing.

Students are expected to be in residency for at least 45 quarter hours of coursework toward the degree. The nature of sequence of the nursing coursework for students in the regular (calendar

year) program requires enrollment in residence for three quarters (Fall, Winter, and Spring). Students in the "summers only" program are to be on campus for at least three (3) full summers.

The graduate programs are implemented with as much flexibility as possible. Individual student needs and interests are considered in the academic program planning. Each student is urged to make educational goals known to the faculty advisor and to maintain a close liaison with the advisor throughout the program of studies.

Course Descriptions

Adult Nursing

S. Butler; P. Lillis; E. Bevis; R. Andrews; N. Barton; J. Billue; P. Bourg; D. Brodt; L. Burrell; E. Carson; M. Chew; D. Fair; M. A. Isaacs-Skelton; M. Weaver.

NSG 345. Adult Nursing I. **(4-3-5 hours)**
Prerequisite: NSG 322

Emphasis is placed on the development of communication and assessment skills relative to the concepts of stress, inflamatory process, homeostasis, and limited motion. Opportunities are provided in client care settings to develop assessment and communication skills.

NSG 346. Adult Nursing II. **(4-4-5 hours)**
Prerequisites: NSG 322, 345

A continued development of communication and assessment skills and addition to the nursing process. Concepts of autoregulation, cellular transport, and pain are emphasized. Client care in an episodic setting provides opportunities for implementation of nursing interventions.

NSG 347. Adult Nursing III. **(2-9-5 hours)**
Prerequisites: NSG 322, 345, 346

Refinement of assessment, communication, and utilization of the nursing process. Concepts of neurological integrity and rehabilitation are emphasized. Opportunities are provided in client-care settings to implement nursing intervention and evaluate the effects of nursing actions.

NSG 324. Nursing in Human Loss and Grieving. **(5-0-5 hours)**
Prerequisite: Junior standing

Study of the conceptual models of loss, grief, death, and dying and their application in the nurse-client interaction.

NSG 404. Seminar and Practicum in Eposodic Nursing. **(2-9-5 hours)**
Prerequisite: Senior standing or permission of the instructor

Students are provided the opportunity to learn and apply nursing theory and process in acute care settings.

NSG 406. Nursing in Crisis Situation. **(3-6-5 hours)**
Prerequisite: Senior standing or permission of the instructor

A study of stress models applied to crisis situations with emphasis on nursing interventions.

NSG 431. Forsenic Nursing (Open). **(5-0-5 hours)**
Prerequisite: Senior classification

Analysis of the sources of law affecting nursing and the legal responsibilities of the professional nurse in client interactions, emergency care, and in societal role. Liability for negligence, and malpractice are considered within the framework of professional standards and accountability.

Distributive Nursing

M. Brandon; B. Brantley; J. Cole; J. King; D. Meeks; R. Messer; S. Moore; B. Riley; P. Shulko.

NSG 318. Epidemiology in Community Health. **(5-0-5 hours)**
Prerequisites: NSG 322 plus at least one other clinical nursing course

An introduction to basic epidemiotogical concepts as applied to groups of people. Included are those pertaining to infectious, noninfectious, chronic diseases and handicapping conditions. Emphasis is placed on the study of relationships between environment, health status and group characteristics. The student will plan an epidemiological study.

NSG 322. Nursing Process. **(4-3-5 hours)**

This course is an initiation into the practice of professional nursing and an introduction to the concept of the nursing process. Emphasis is placed on the interrelationship of cognitive, affective, and psychomotor aspects of nursing care. Opportunities are provided for the student to learn and demonstrate basic assessment, implementation, planning, and evaluation skills.

NSG 326. Nursing in Human Sexuality. **(5-0-5 hours)**
Prerequisites: NSG 322 plus at least one other clinical nursing course

The study of biological and cultural determinants of sexual behaviors. Examination of health issues and personal values related to sex and sexual relationships with consideration of their effects on and implications for contemporary nursing practice. Reviewing each psychosexual stage of development, the sexual needs and problems are identified and various nursing interventions are examined. Emphasis is placed on the development of communication skills, methods of reducing anxiety, and methods of sex education.

NSG 405. Seminar and Practicum in Distributive Nursing. **(2-9-5 hours)**
Prerequisites: All 300 level nursing courses and NSG 419

Students are provided the opportunity in a program of individualized study to learn and apply nursing theory and process in selected non-acute care settings. Emphasis is placed on methods of health education. Health hazard appraisals are used to identify risk factors in individuals

and in populations in order to plan strategies to maintain their health. Change theories are used to plan change within health care systems.

NSG 416. Investigation of a Problem in Community Nursing. **(2-6-5 hours)**

Students are provided the opportunity in a program of individualized study to learn and apply nursing theory and research methodology in the investigation of a community nursing problem.

NSG 417. Community Health Organization. **(4-3-5 hours)**
Prerequisites: All 300 level courses, NSG 322, NSG 333 and NSG 334

This course involves a study of the background, new developments, issues and trends in health care delivery at local, state, and national levels. The objectives, sponsorship and requirements of major health programs are considered. Emphasis is placed on financing, organizing and delivery of health services. The course includes a survey of the community's attempts to meet its major health problems.

NSG 419. Family Health Services. **(2-6-5 hours)**
Prerequisites: All 300 level courses

An in-depth study of the delivery of care to families and groups of clients with emphasis on prevention and health maintenance. Assessment, interviewing, and teaching skills are stressed in determining the nursing intervention strategies to promote and maintain the health of families and groups of clients in the community. Interdisciplinary approach to health services for clients is emphasized.

NSG 421. Occupational Health Nursing. **(2-4-5 hours)**
Prerequisite: Senior classification

Study of the nursing process for the purpose of conserving, promoting and restoring the health of individuals and groups through their place of employment. Includes the social and health characteristics of the working population, legal aspects, and functions and organization of occupational health programs at the plant, state, and federal levels. Environmental factors are included.

NSG 453. Nursing Trends. **(5-0-5 hours)**

An analysis of the trends and current problems in nursing education programs and to the practice of professional nursing.

NSG 713. Perspectives in Adult Health. **(3-9-5 hours)**
Prerequisites: NSG 506 and NSG 709

An overview of the major health problems experiences by adults. Clinical advances are studied which will affect the nurse clinician's role. This course is designed to prepare nurses to provide primary health care to individuals and families.

NSG 714. Practicum I: Family Nurse Clinician. **(1-15-5 hours)**
Prerequisites: NSG 506, NSG 709, NSG 710A, NSG 713, PHY 590, EDU 702

Students are provided the opportunity in a program of individualized study to apply and synthesize previous knowledge through providing primary nursing care to clients and families in a family practice setting. This experience will be gained with the guidance of preceptors. Students are expected to test, adapt, evaluate and refine nursing protocols for health care in the clinical setting. When feasible, students will initiate or participate in research designed to improve the delivery of health care.

NSG 715. Practicum II: Family Nurse Clinician. **(1-15-5 hours)**
Prerequisite: NSG 714

A continuation of the Family Nurse Clinician practicum experience aimed at a synthesis of theory and practice. Emphasis is on evaluation and refinement of the student's practice. The students will gain increased accuracy and efficiency in performing skills which will enable them to work with an increasing number of clients.

NSG 781. Advances in Clinical Practice. **(5-0-5 hours)**
Prerequisite: Graduate standing

This course is designed to assist the student in analyzing the forces which affect change in clinical practice. It enables the student to explore the factors which lead to continued maturation of the profession. It deals with changes which have occurred and future trends in nursing care.

Maternal-Child Nursing

C. Foster, Chairperson; P. Akery; M. Coleman; S. Gallo; J. Morse; J. Sisk; J. Stump.

NSG 349. Introduction to Family Centered Nursing. **(4-3-5 hours)**

An introduction to family-centered nursing with emphasis on meeting the health needs of the well family in the child bearing and child rearing years. Students implement their learning by observing and assessing care for families in a variety of distributive settings.

NSG 351. Family Nursing I. **(3-6-5 hours)**

This course focuses on the concept of the levels of wellness and deviations from wellness of childbearing as involving the entire family unit. Emphasis is placed on the psychosocial, physical, and cultural developmental principles which aid the professional nurse informulating, analyzing and evaluating a family care program.

NSG 352. Family Nursing II. **(3-6-5 hours)**

This course deals with families who exhibit pathological conditions and/or abnormal coping mechanisms during the childrearing years. The role of the nurse in caring for childrearing families will be stressed. Emphasis will be on utilizing the nursing process to meet individual client and family needs.

NSG 354. Nursing in the Childbearing Family. **(2-9-5 hours)**

The course will focus on the maternity cycle and the family. The student will have the opportunity to gain clinical experience within his chosen component of the childbearing cycle.

NSG 355. Nursing in the Childrearing Family. **(2-9-5 hours)**

The course will focus on the childrearing period of the family. The student will have the opportunity to gain

clinical experience within his chosen component of the childrearing cycle.

NSG 420. School Nursing. **(4-3-5 hours)**
Prerequisite: Senior classification

An in-depth study of the nursing process as used in the school health program; the organizational patterns in which the school nurse practices, and the legal aspects pertaining to preventive and emergency care.

NSG 709. The Family and Health Care Delivery. **(4-3-5 hours)**

Growth and development of the family is the framework within which theories of man, society, health, stress and adaptation and nursing will be studied. The evolving role of nursing within the changing health care delivery system will be emphasized to assist the students to formulate their own theories of family health care.

NSG 710A. Maternal-Child Nursing. **(4-3-5 hours)**

Exploration of nursing, psychological and sociological theories which contribute to the understanding of health maintenance, prevention and treatment during the childbearing and childrearing stages of family development. Through clinical experiences and classroom discussions the student will develop the ability to utilize the theories and physiological aspects to intervene during a family crisis.

NSG 710B. Maternal-Child Nursing. **(3-6-5 hours)**
Prerequisite: NSG 710A

This course deals with the maturational and situational crisis of the maternity and pediatric clients. Emphasis will be on the utilizing nursing theories and nursing process to 1) make nursing diagnosis, 2) write nursing care prescriptions, 3) implement nursing care prescriptions and 4) evaluate the results of the nursing care.

NSG 711. Practicum: Teaching Maternal-Child Nursing. **(2-9-5 hours)**
Prerequisites: NSG 709, NSG 710 A&B, EDU 700, EDU 701

A course designed to assist students in generating new alternatives and expanding current methods for teaching nursing. Experiences are provided in selecting and implementing a variety of learning strategies.

NSG 712. Practicum: Clinical Specialization, Maternal-Child Nursing. **(2-9-5 hours)**
Prerequisites: NSG 709, NSG 710 A&B

Guided learning experiences are provided for students to implement a role as clinical specialist in areas of interest.

Mental Health—Psychiatric Nursing

L. Ellis, Chairperson; B. Hamm; B. Hickman; M. Killeen; P. Moores; J. Murray; L. Ryan; I. Schepartz; P. Sykes.

NSG 333. Mental Health and Psychiatric Nursing I. **(4-3-5 hours)**

The focus of this course is the role of the baccalaureate nurse who functions with a multidisciplinary team in the prevention of mental illness and the care, treatment and rehabilitation of mentally ill patients. Determinants will focus on the person as he relates to self, others, and his total environment, and reacts to the stresses of life. The role of the nurse in fostering growth in self and others will be emphasized. The basic approach is open discussion, to clarify thinking, share learning experiences encourage discussion of "feelings," enlarge upon students' previously gained knowledge of normal growth, developmental behaviors, mental health, and mental illness.

NSG 334. Mental Health and Psychiatric Nursing II. **(1-12-5 hours)**

Students work with "healthy" families in their own environment (distributive) as well as working intensively with selected patients in three major psychiatric settings (episodic). Observational experiences are also provided within community resources for the mentally ill and the mentally retarded. Students are exposed to theories which include both descriptive and dynamic approaches.

NSG 380. Applied Group Dynamics. **(5-5-5 hours)**

Analysis of group theory and roles, practice in membership and leadership roles in the Health Care Team.

NSG 721A. Mental Health and Psychiatric Nursing. **(5-5-5 hours)**

Psychopathology as a unique life situation. There is concurrent clinical extension of theory in selected facilities. Explanation of the process of psychotherapy and the therapist role is initiated in the course.

NSG 721B. Mental Health and Psychiatric Nursing. **(5-10-5 hours)**

The essential act of caring is manifested by engagement in the development of nursing theory and principles through clinical inquiry and the application of research methodology.

NSG 722. Practicum: Teaching Mental Health and Psychiatric Nursing. **(2-8-5 hours)**
Prerequisites: NSG 721 A&B, EDU 700, EDU 701

NSG 723. Practicum: Clinical Specilization, Mental Health—Psychiatric Nursing. **(2-8-5 hours)**
Prerequisites: NSG 721 A&B

Nursing Administration

N. Langner, Chairperson; D. Arnold; D. Frazier; A. Lee; E. Stringer.

NSG 489. Management Science in Health Care Delivery (Open). **(4-2-5 hours)**

The study of current social issues related to health care; issues and problems in nursing; principles of leadership; professionalism; the management of human resources for the delivery of nursing care for clients.

NSG 740, 741. Seminar in Nursing Administration. **(4-2-5 hours)**
Prerequisite (each): Admission to the Graduate Program in Nursing Administration

Application of concepts and principles of administration and personnel management in the nursing service

situation. The case method is used for added realism in problem solving.

NSG 742. Practicum in Nursing Administration. (2-6-5 hours)
Prerequisites: NSG 740 and 741

Observation of, and limited participation in the administration of a nursing service department. The experience is guided by a preceptor in an agency selected jointly by the student and major professor. Field conferences of students, faculty and agency personnel permit the exchange of ideas related to field problems.

NSG 743. Practicum: Teaching Nursing Administration. (2-6-5 hours)
Prerequisites: NSG 740, NSG 741 and NSG 742. Enrollment is by special permission only.

This course focuses learning activities on teaching and learning methods with emphasis on the teaching of management in health care and/or teaching the administration of health care delivery. The student serves a preceptorship under the direct guidance of a faculty member whose preparation is in teaching and in the area of the administration of nursing.

NSG 745. Seminar in Administration of Continuing Education Programs. (5-0-5 hours)
Prerequisite: EDU 705 or equivalent

A seminar focusing on the administrative aspects of Continuing Education. Resource consultants provide the dimension of reality and enhance the learners perception of the emerging discipline from the perspective of local, state and national efforts. The concept of peer responsibility for fostering creativity is nurtured to facilitate attainment of individual and course objectives. The impact of multiple delivery systems, public service factors, professional efforts, non-traditional learning systems are some of the issues discussed.

NSG 746. Practicum: Administration of Continuing Education Programs in Nursing. (5 hours)
Prerequisites: EDU 705, NSG 745, NSG 748

The practicum consists of a field experience under the guidance of a preceptor supplemented by classroom sessions. The practicum serves as a synthesizing and discovery experience which provides opportunities for testing theory in the practice arena.

Non-Departmental Course Descriptions

NSG 399. Independent Study. (Variable Credit)

EDU 600. Educational Psychology (Open). (5-0-5 hours)
Theories of learning and their application in higher education.

EDU 601. Social Organization (Open). (5-0-5 hours)
A study of the basic principles of social organization including an examination of how groups and complex organizations are structured and how they function as structures.

EDU 621. Group Dyanmics (Open). (5-5-5 hours)

EDU 700. Curriculum and Instruction in Higher Education (Open). (5-0-5 hours)
Provides the student with a knowledge of the curriculum of higher education. An attempt is made to show that curriculum as a whole is involved with objectives, content, strategies, teaching, and learning; their interrelationships, and their involvement in the teaching-learning process.

EDU 701. Methods of Educational Evaluation in Higher Education (Open). (5-0-5 hours)
A systematic development of evaluation procedure appropriate to the evaluation of student performance. Considerations of validity and reliability, selected statistical procedures and the relationship.

EDU 702. Methods of Educational Research (Open). (5-0-5 hours)
A systematic treatment of the methodologies appropriate to educational research; fundamentals of statistical inference, research design and critical analysis of research reports. The student will be expected to design and appropriate research experience.

EDU 705. The Adult As A Learner (Open). (5-0-5 hours)
A course designed to assist students in analyzing implications of psychological theories of adult development and learning preparatory to establishing learning needs, goals, strategies and evaluation plans suitable for the adult learner.

NSG 748. Program Planning for Continuing Education. (5-0-5 hours)
The course is designed to consider basic concepts of planning, conducting and evaluating continuing education programs. Learning activities centering on the process of planning for continuing education programs in light of vital contemporary issues.

Assessment of needs, creative programming and evaluation for adults, professional and societal mandates for excellence, funding considerations and implications for research in continuing education are some of the issues inherent in program planning decisions which are considered in this course. Learning activities are conducted in the classroom and through field experience.

NSG 784. Dimensions of Professional Inquiry. (5-0-5 hours)
The use of the investigative method in analysis and synthesis of role theory and change theory specifically focused on the processes used by the nursing profession in designing, testing and implementing programs of health services and professional education.

NSG 785. Dimensions of Professional Practice. (5-0-5 hours)
A course designed to enable students to articulate advanced nursing practice in distributive settings. To accomplish this the role and responsibilities of the nurse in group practice are explored, including designing contracts, assuming accountability for independent nursing judgments and establishing collaborative relationships with other health professionals.

NSG 921. Investigation of a Problem. (Variable Credit)
Prerequisite: Admission to candidacy

NSG 930. Research, Project, or Guided Elective Study. (Variable Credit)
Prerequisite: Admission to candidacy

appendixes

Appendix A

University System of Georgia Board of Regents

		Current Term
RUFUS B. COODY, Vienna	State-at-Large	1976-1983
JESSE HILL, JR., Atlanta	State-at-Large	1973-1978*
O. TORBITT IVEY, JR., Augusta	State-at-Large	1977-1984
MILTON JONES, Columbus	State-at-Large	1974-1981
LAMAR R. PLUNKETT, Bowdon	State-at-Large	1974-1981
ERWIN A. FRIEDMAN, Savannah	First District	1976-1983
CHARLES T. OXFORD, Albany	Second District	1975-1982
JOHN H. ROBINSON, III, Americus	Third District	1972-1979
SCOTT CANDLER, JR., Decatur	Fourth District	1977-1984
ELRIDGE W. McMILLAN, Atlanta	Fifth District	1975-1982
DAVID H. TISINGER, Carrollton	Sixth District	1971-1978
JAMES D. MADDOX, Rome	Seventh District	1973-1980
CHARLES A. HARRIS, Ocilla	Eighth District	1971-1978
P. R. SMITH, Winder	Ninth District	1973-1980
CAREY WILLIAMS, Greensboro	Tenth District	1972-1979

*Unexpired portion of seven-year term.

Officers of the Board of Regents

CHARLES T. OXFORD, Chairman
MILTON JONES, Vice Chairman
GEORGE L. SIMPSON, JR., Chancellor
JOHN W. HOOPER, Vice Chancellor
HENRY G. NEAL, Executive Secretary
SHEALY E. McCOY, Vice Chancellor-Fiscal Affairs and Treasurer

Staff of the Board of Regents

GEORGE L. SIMPSON, JR., Chancellor
JOHN W. HOOPER, Vice Chancellor
HENRY G. NEAL, Executive Secretary
SHEALEY E. McCOY, Vice Chancellor-Fiscal Affairs and Treasurer
FRANK C. DUNHAM, Vice Chancellor-Construction and Physical Plant
MARIO J. GOGLIA, Vice Chancellor-Research
HOWARD JORDAN, JR., Vice Chancellor-Services
HARRY B. O'REAR, Vice Chancellor-Health Affairs
W. COYE WILLIAMS, JR., Vice Chancellor-Academic Development
HASKIN R. POUNDS, Assistant Vice Chancellor
JAMES L. CARMON, Assistant Vice Chancellor-Computer Systems
MARY ANN HICKMAN, Assistant Vice Chancellor-Personnel
ROBERT M. JOINER, Assistant Vice Chancellor-Communications
HARRY H. MURPHY, JR., Director of Public Information
L. HARLAN DAVIS, Director of Interinstitutional Programs in International Affairs

Appendix B

Administration

President
William H. Moretz

President Emeritus
Edgar R. Pund

Provost
Lois T. Ellison

Vice-President and Treasurer
James A. Blissit

Dean, School of Allied Health Sciences
Raymond C. Bard

Dean, School of Dentistry
Judson C. Hickey

Dean, School of Graduate Studies
Sam A. Singal

Dean, School of Medicine and Medical Director
Fairfield Goodale, Jr.

Dean, School of Nursing
Neila A. Poshek

Dean Emerita
Louise E. Grant

Director, Business Services
Sam B. Wingfield

Director, Division of Systems and Computer Services
J. B. Mathews

Comptroller
H. Alan Campbell

Comptroller Emeritus
Thomas N. Dwyer

Director, Division of Biomedical Communications
Paul J. Brucker

Administrator for Hospital and Clinics
Richard E. Gillock

Director, Division of Institutional Relations
James C. Austin

Director, Division of Internal Auditing
Donald C. Smith

Librarian
Thomas G. Basler

Director, Personnel Division
John C. Evers

Director, Division of Public Safety
Bruce Morgan

Director, Physical Plant Division
W. Clay Adamson, Jr.

Director, Procurement
Lewis K. Parrish, Jr.

Director, Division of Student Affairs
James B. Puryear

Associate Director
Bernard J. Abbott

Assistant Director and Registrar
Walter M. Jones, Jr.

Assistant Director, Minority Student Affairs
James E. Carter, III

Director of Financial Aid
Cheryl Wilkes

Director of Housing and Placement
George M. Martin

Assistant Coordinator of Academic Admissions
Elizabeth Griffin

Assistant Director of Financial Aid
Margaret Prince

Assistant Registrar
James McLeod

Coordinator of Campus Activities
Sheryle Bolton

Admissions Counselor
Joy Jones

Appendix C

Faculty Listings

*Asterisk indicates Graduate Faculty Appointment.

Abbott, Bernard J., Assistant Professor, Health Education. Florida State University, B.S., M.S.; Michigan State University, Ph.D.

***Abdel-Latif, Ata A.,** Professor, Cell and Molecular Biology. DePaul University, B.S., M.S.; Illinois Institute of Technology, Ph.D.

Abdulla, Abdulla M., Assistant Professor, Medicine. University of Karachi, B.Sc.; Dow Medical College, M.B.B.S.

Abele, Donald C., Professor, Dermatology and Medicine. Central Methodist College, B.A.; Washington University Medical School, M.D.

***Abney, Thomas O.,** Assistant Professor, Endocrinology. University of Georgia, B.S., M.S., Ph.D.

Abraham, Edathara C., Associate Research Professor, Cell and Molecular Biology. Kerela University, B.S.; University of Louisville, Ph.D.

Adams, Homer G., Instructor, Surgery (Otolaryngology). Auburn University, B.A., M.S.

Adams, Sarah Chapman, Clinical Instructor, Physical Therapy. Medical College of Georgia, B.S.

Agostas, William N., Clinical Professor, Medicine. Medical College of Georgia, M.D.

Ahearn, A. Mason, Clinical Instructor, Surgery (Orthopedics). Cornell University, M.D.

***Ahlquist, Raymond P.,** Charbonnier Professor, Pharmacology. University of Washington, B.S., M.S., Ph.D.

Ahmann, Thomas M., Assistant Clinical Professor, Surgery. University of Missouri, A.B., M.D.

Akamatsu, Yasuyuki, Assistant Professor, Pathology. Nara Medical College, M.D.; Osaka University, Ph.D.

Akhtar, Kashid A., Research Associate, Cell and Molecular Biology. University of Punjab, B.S., M.S.; University of London, Ph.D.

Akery, Phyllis R., Instructor—SONAT, Maternal-Child Nursing. Medical College of Georgia, B.S.N., M.S.N.

Albrecht, Jane, Clinical Instructor, Occupational Therapy. University of Iowa, B.S.

Alkis, Mary R., Clinical Instructor, Medical Record Administration. Southwestern at Memphis, B.A.

Allen, Lane, Professor Emeritus, Anatomy. University of Georgia, B.S., M.S.; Georgetown University, Ph.D.; Medical College of Georgia, M.D.

Allen, Marshall B., Jr., Professor and Chief, Surgery (Neurosurgery). University of Mississippi, B.A.; Harvard University, M.D.

Allen, Virginia, Research Assistant Professor, Occupational Therapy. Indiana University, B.S.; Medical College of Georgia, M.H.E.

Alexander, V. Thomas, Assistant Clinical Professor, Medical Technology. Kerala University, B.S., B.Ed., M.S.; University of Virginia, Ph.D.

Allison, J. Richard, Associate Clinical Professor, Dermatology. University of North Carolina, A.B.; Medical College of South Carolina, M.D.

Allmond, Reamer W., Instructor, Pedodontics. Medical College of Georgia, D.M.D.

Alperin, Henry, Clinical Assistant Professor, Radiology. University of Richmond, B.S.; Medical College of Virginia, M.D.

Althisar, Henry M., Assistant Professor, Medicine. Medical College of Georgia, M.D.

Alvarez-Mena, Sergio C., Associate Clinical Professor, Medicine. LaSalle College, B.S.; Matanzas Institute, B.S.; Havanna School of Medicine, M.D.

***Anderson, Ann S.,** Chairperson and Associate Professor, Medical Technology. University of Georgia, B.S.; Medical College of Georgia, M.S.

Anderson, Stanley J., Instructor, Restorative Dentistry. Medical College of Georgia, D.M.D.

Andrews, Raymond, Instructor—SONAT, Adult Nursing. Medical College of Georgia, B.S.N., M.S.N.

Anusavice, Kenneth, Assistant Professor, Restorative Dentistry. Worcester Polytechnic Institute, B.S.; University of Florida, Ph.D.; Medical College of Georgia, D.M.D.

Armitage, David T., Associate Clinical Professor, Psychiatry. Muskingum College, B.A.; State University of New York Upstate College of Medicine, M.D.

Armstrong, George F., Assistant Professor, Pediatrics. University of Georgia, B.S.; Duke University, M.D.

Armstrong, Jane E., Instructor, Neurology and Section of ENT. Armstrong College, A.A.; University of Georgia, B.S.

Arnold, Daisy, Assistant Professor, Nursing Administration. Medical College of Georgia, B.S.N.; M.S.N.

Arnold, McAlpin H., Assistant Professor, Family Practice. George Washington University, B.A.; M.D.

Arrington, John B., III, Assistant Professor, Pathology. University of Mississippi, B.S.; Tulane University Medical School, M.D.

Atkinson, Charles D., Assistant Professor, Orthodontics. New York University, D.D.S., M.S.D.

Aton, James K., Clinical Assistant Professor, Dermatology. Emory University, B.A.; University of Maryland, M.D.

***Ault, Leilee P.,** Professor, Nursing. University of Pennsylvania, B.S.N.E., M.S.

Avecilla, Leonard S., Instructor, Radiologic Technologies. Boston University, B.S.; Oregon State University, M.S.

Ayerdi, Evalt, Clinical Instructor, Medicine. University of San Carlos School of Medicine, M.D.

Aziz, Ezzat M., Associate Professor, Pediatrics. W. Middlesex Hospital, London, England, D.C.H.; Shams University, Cairo, Egypt, M.B.

Badger, Walter L., Assistant Professor, Community Dentistry. University of Maryland, D.D.S.

Bahreini, Maryam, Assistant Professor, Obstetrics and Gynecology. Pahlavi University, M.D.

Bailey, Henry W., Assistant Clinical Instructor, Surgery. Medical College of Georgia, M.D.

Bailey, Joseph P., Jr., Associate Dean, Clinical Sciences (Medicine). Professor, Medicine. Chief, Rheumatology. Mercer University, B.S.; Medical College of Georgia, M.D.

Bailey, Tarver B., Clinical Instructor, Surgery (Urology). Texas Christian University, B.S.; University of Texas Medical Branch, M.D.

Bailey, Thomas E., Associate Clinical Professor, Pediatrics. Medical College of Georgia, M.D.

Ball, Henry F., Clinical Assistant Professor, Psychiatry. Mercer University, A.B.; Medical College of Georgia, M.D.

Bandisode, Madhukar S., Assistant Clinical Professor, Medicine. Grant Medical College—University of Bombay, M.B.B.S., B.Sc., M.Sc., M.D.

***Bard, Raymond C.,** Professor, Cell and Molecular Biology, Dean, School of Allied Health Sciences. College of the City of New York, B.S.; Indiana University, M.A., Ph.D.

Barfield, William E., Assistant Professor, Obstetrics and Gynecology. The Citadel, B.S.; Emory University, M.D.

Barfield, William E., Jr., Assistant Professor, Obstetrics and Gynecology. The Citadel, B.S.; Medical College of Georgia, M.D.

Barnie, James T., Associate Professor, Pedodontics. Indiana University, D.D.S.; University of Rochester, M.S.

Barrett, S. Michael, Assistant Professor, Anatomy.

Barton, Betty, Instructor, Pathology. University of South Carolina, B.S., M.S.

Barton, Nancy, Instructor—SONAT, Adult Nursing. Medical College of Georgia, B.S.N.; M.S.N.

Basler, Thomas G., Director of Libraries and Associate Professor, Library. University of Miami, B.Ed.; Florida State University, M.S.; Laurence University, Ph.D.

Bass, William T., Assistant Professor, Pedodontics. Emory University, D.D.S.

Battey, Louis L., Clinical Professor, Medicine. College of the Holy Cross, B.S.; Medical College of Georgia, M.D.

Battle, Lucius W., Jr., Assistant Clinical Professor, Prosthodontics. Emory University, D.D.S.

Bazemore, J. Malcolm, Clinical Professor Emeritus, Medicine. Medical College of Georgia, M.D.

Beaver, Melissa P., Clinical Instructor, Medical Record Administration. Medical College of Georgia, B.S.

Beckham, Richard W., Assistant Professor and Chairperson, Respiratory Therapy. University of Florida, B.S., M.Ed.

Beckwith, Mertin M., Associate Clinical Professor, Surgery. Marquette University, M.D.

Becton, James L., Assistant Professor (Orthopedics), Surgery. Wake Forest College, B.S.; University of Minnesota, M.S.; Medical College of Georgia, M.D.

Beeson, C. Walker, Assistant Clinical Professor, Medicine. University of Georgia, B.S.; Medical College of Georgia, M.D.

Belk, Beverly, Associate Professor, Pediatrics. Mercer University, A.B.; Medical College of Georgia, M.D.

Bell, Ladean P., Clinical Instructor, Medical Technology. Utah State University, B.S.

Bemis, Susan A., Associate Professor, Physical Therapy. San Diego State College, B.A.; University of California, B.S.; State University of New York, M.S.

Bennett, James W., Professor, Pediatrics. Medical College of Georgia, M.D.

Bennett, Robert, Clinical Professor, Medicine. University of Minnesota, M.S.; University of Pittsburgh, B.S., M.D.

Benton, Edred C., Associate Professor, Periodontics. Emory University, B.S.; Emory University School of Dentistry, D.D.S., M.S.D.

Berens, Sanford V., Clinical Assistant Professor, Radiology. Dartmouth College, A.B.; Dalhousie University, M.D.

Berg, Edward W., Associate Professor, Surgery (Orthopedics) and Assistant Professor, Medicine (Rheumatology). University of Colorado, B.A., M.D.

*__Best, Gary K.,__ Associate Professor, Cell and Molecular Biology. Southwestern State College, B.S.; Oklahoma State University, Ph.D.

Bethencourt, A. V., Assistant Clinical Professor, Medicine. University of Florida, B.S., M.D.

Bevis, Em O., Professor and Coordinator (SAVSAT), Adult Nursing. Emory University, B.S.N.; University of Chicago, M.A.

*__Bhalla, Vinod K.,__ Associate Professor, Endocrinology. St. John's College, Agra University, B.S., M.S.; National Chemical Laboratory, Ph.D.

Bhatti, Nazir A., Associate Professor, Surgery (Orthopedics). Government College, F.Sc.; King Edward Medical College, M.B.B.S.

Bigger, John F., Associate Clinical Professor, Ophthalmology. Duke University, A.B.; Washington University School of Medicine, M.D.

Biggerstaff, Edward D., III, Instructor, Obstetrics and Gynecology. Clemson University, B.S.; Medical University of South Carolina, M.D.

Billue, Joyce, Instructor, Adult Nursing. Medical College of Georgia, B.S.N., M.S.N.

Bishop, Emmett R., Jr., Assistant Professor, Psychiatry. University of Georgia, B.S.; Medical College of Georgia, M.D.

Bittle, Charles R., Associate Clinical Professor, Anesthesiology. Bowman Gray School of Medicine, M.D.

Black, Aileen J., Clinical Instructor, Medical Record Administration. Lees-McRae Junior College, A.A.; Memorial Mission Hospital, R.R.A.

***Black, Owen, Jr.,** Associate Research Professor, Medicine and Cell and Molecular Biology. University of Oklahoma, B.S.; University of Oklahoma Medical Center, M.S., Ph.D.

Blalock, H. Sherman, Assistant Professor, Surgery (Orthopedics). Shorter College, A.B.; Medical College of Georgia, M.D.

Blalock, Jack H., Assistant Professor, Internal Medicine. University of Alabama, A.B.; Tulane University, M.D.

Blanchard, Thomas W., Assistant Professor, Surgery (Urology). The Citadel, B.S.; Medical College of South Carolina, M.D.

Blevin, Keith S., Assistant Professor, Oral Surgery. Hope College, B.A.; Medical College of Virginia, School of Dentistry, D.D.S.

Blight, Edward M., Jr., Assistant Clinical Professor, Surgery (Urology). The Citadel, B.S.; University of California, M.D.

Blitch, Pierce G., Jr., Associate Clinical Professor, Medicine. Emory University, A.B.; Medical College of Georgia, M.D.

Bliven, Floyd E., Jr., Professor, Surgery. Chief, Orthopedics. University of Rochester, A.B., M.D.

***Bockman, Dale E.,** Professor and Chairman, Anatomy. Southwestern Missouri State College, B.S.; Los Angeles State College, M.A.; University of Illinois, Ph.D.

Boineau, John P., Professor, Medicine. University of South Carolina, B.S.; Duke University, M.D.

***Bond, Gary C.,** Assistant Professor, Physiology. University of Kansas, B.S.; University of Kansas Medical Center, Ph.D.

Boshell, Jerry, Assistant Professor, Anatomy. University of Alabama, D.M.D., Ph.D.

Botnick, Robert S., Associate Clinical Professor, Medicine. Duke University, B.S.; Baylor Medical School, M.D.

Bourg, Pamela, Instructor, Adult Nursing. Louisiana State University, B.S.; Boston University, M.S.N.

Bowden, Lois A., Clinical Instructor, Medical Record Administration. Andrews University, R.R.A.

Bowden, Talmadge A., **Jr.,** Associate Professor, Surgery. University of Georgia, B.S.; Medical College of Georgia, M.D.

Bowles, Lester L., Professor Emeritus of Anatomy. Franklin College, A.B.; Indiana University, M.D.

Boyd, Claud A., Clinical Instructor, Dermatology. University of Mississippi, B.S.; University of Miami, M.D.

Boyd, William S., Associate Clinical Professor, Obstetrics and Gynecology. University of Georgia, B.S.; Emory University, M.A.; Medical College of Georgia, M.D.

Bramblett, Richard M., Assistant Clinical Professor, Medical Record Administration. Associate Professor, Health Systems and Information Sciences; Assistant Director for Systems Development, Systems and Computer Services. Georgia Institute of Technology, B.I.E., M.S.I.E., Ph.D.

Brand, Robert L., Clinical Instructor, Surgery (Orthopedics). Emory University, B.A.; Medical College of Georgia, M.D.

Brandon, Marsha, Instructor, Distributive Nursing. Tift College, B.S.; Medical College of Georgia, M.S.N.

Bransome, Edwin, Jr., Professor, Medicine. Chief of Metabolic and Endocrine Disease. Yale University, A.B.; University of Colorado, M.D.

Braselton, W. Emmett, Jr., Associate Research Professor, Medicine. Assistant Professor, Endocrinology. University of Wisconsin, B.S., M.S., Ph.D.

Bridges, Henry B., Clinical Instructor, Surgery (Orthopedics). Emory University, A.B.; Medical College of Georgia, M.D.

Bridges, Mercer T., Instructor, Surgery (Orthopedics). Furman University, B.A.; Columbia University, M.A.; Medical College of Georgia, M.S.

Brocato, Simone, Assistant Clinical Professor, Medicine. Loyola University, B.S.; Tulane University, M.D.

Brodt, Dagmar, Associate Professor, Adult Nursing. St. Louis University, M.S.N.E., Ph.D.

Bronstein, Edwin S., Professor, Obstetrics and Gynecology; Chief, Maternal Health and Family Planning. State University of New York, B.A.; University of California, Berkeley, M.P.H.; Downstate Medical Center of New York, M.D.

Brooks, Jack D., Assistant Professor, Community Dentistry. Indiana University, D.D.S.; Iowa University, M.S., M.A.

Brown, Allen N., Assistant Professor, Family Practice. Meharry Medical College, M.D.

Brown, James D., Assistant Professor, Restorative Dentistry. Tufts University, D.M.D.

Brown, Jessie O., Associate Professor, Associated Dental Sciences and Community Dentistry. University of Alabama, R.D.H.; Medical College of Georgia, B.S.

Brown, Mark, Professor, Radiology. Chief, Nuclear Medicine. Medical Director, Radiologic Technology. University of Miami, B.S.; Vanderbilt University, M.D.

Brown, Stephen W., Associate Clinical Professor, Radiology. Louisiana State University, B.S., M.D.

Brown, Tobie J., Clinical Instructor, Medical Technology. University of Massachusetts, B.S.

Brown, Walter J., Jr., Professor, Medicine (Hypertension and Clinical Pharmacology). Brown University, A.B.; University of Rhode Island, M.S.; Medical College of Georgia, M.D.

***Brownell, George H.,** Associate Professor, Cell and Molecular Biology. University of Minnesota, B.A.; University of South Dakota, M.A., Ph.D.

Brownell, Julie P., Clinical Instructor, Medical Technology. University of South Dakota, B.A.

Brucker, Paul J., Professor and Chairman, Medical Illustration, Director of Health Communications. College of William and Mary, A.B.; Indiana University, M.Ed., Ed.D.

Bruggemann, Linda F., Clinical Instructor, Medical Technology. University of Georgia, B.S.; Medical College of Georgia, B.S.

***Bruno, Susan M.,** Professor and Associate Dean—CE, Nursing. Catholic University, B.S.N.; University of Rochester, M.S.

Bruns, William L., Jr., Clinical Instructor, Obstetrics and Gynecology. University of Georgia, B.S.; Medical College of South Carolina, M.D.

Bryans, C. Iverson, Jr., Professor and Vice-Chairman, Obstetrics and Gynecology. Chief, Section of Obstetrics. University of Georgia, B.S.; Medical College of Georgia, M.D.

Bryant, Arthur R., Clinical Professor, Psychiatry. Boise Junior College, A.A.; University of Utah, B.S., M.S., Ph.D.

Bulkacz, Jaime, Assistant Professor, Oral Biology, Cell and Molecular Biology. University of Buenos Aires, D.D.S.; University of California, Ph.D.

Bunn, Gerald T., Assistant Professor, Restorative Dentistry. Emory University, D.D.S.

Burch, Sandra E., Assistant Clinical Professor, Instructor, Radiology, and Radiologic Technologies. Emory University, B.S., M.Sc.

Burdeaux, Billie, Instructor, Community Dentistry, Baylor University, D.D.S.

Burgamy, Clyde A., Clinical Instructor, Obstetrics and Gynecology. Medical College of Georgia, M.D.

***Burnett, George W.,** Professor and Associate Dean, Biologic Sciences (Dentistry). Chairman and Professor, Oral Biology; Professor, Cell and Molecular Biology. Texas Technological College, B.A.; University of Texas, M.A.; Washington University, D.D.S.; University of Rochester, Ph.D.

Burrell, Lenette, Assistant Professor—SONAT, Adult Nursing. Woman's College, B.S.; Medical College of Georgia, M.S.N.

***Bustos-Valdes, Sergio E.,** Professor, Oral Biology. Assistant Professor, Cell and Molecular Biology. University of Chile, D.D.S.; University of Rochester, Ph.D.

Butler, Clarence C., Associate Professor, Medicine. Vanderbilt University, A.B.; Duke University, M.D.

Butler, Sharon, Assistant Professor and Interim Co-Chairman, Adult Nursing. Medical College of Georgia, B.S.N., M.S.N.

Button, Constance L., Clinical Instructor, Radiologic Technologies. Piedmont College, B.S.

Byne, J. Miller, Jr., Associate Clinical Professor, Medicine. Medical College of Georgia, M.D.

*__Byrd, J. Rogers__, Associate Professor, Endocrinology. Wake Forest College, B.S.; University of Michigan, M.A., Ph.D.

Cabaness, C. Daniel, Assistant Dean, Administration; Associate Professor, Medicine. University of Georgia, B.S.; Medical College of Georgia, M.D.

Caldwell, Joseph L., Jr., Assistant Clinical Professor, Surgery. Medical College of Georgia, M.D.

Callaghan, Nathan R., Associate Clinical Professor, Prosthodontics. Northwestern University, D.D.S.

Calvert, Jon C., Professor and Chairman, Family Practice. Leland Stanford, B.A.; Baylor University College of Medicine, M.Sc., M.D., Ph.D.

Calvert, Lynette, Assistant Professor, Pediatrics. Baylor University, B.A.; Baylor College of Medicine, M.D.

Canedo, Marion, Assistant Professor, Medicine. San Simon University, M.D.

Cannon, Mary R., Assistant Professor, Associated Dental Sciences. Medical College of Georgia, B.S.; University of Michigan, M.S.

Caplan, Gerald E., Associate Clinical Professor, Radiology. Emory University, A.B.; Medical College of Georgia, M.D.

Cardosa, David, Assistant Clinical Professor, Obstetrics and Gynecology. Santanejer, B.S.; National University of Columbia, M.D.

Carlsen, Pat N., Assistant Professor, Occupational Therapy. State University of New York at Buffalo, B.S.; University of Florida, M.O.T.

Carlson, Roy E., Assistant Clinical Professor, Surgery. Western Reserve University, A.B.; Ohio State University, M.D.

Carlton, William H., Associate Professor, Radiology. Emory University, B.S., M.S.; Rutgers University, Ph.D.

*__Carr, Albert A.__, Professor and Director, CIU Section of Hypertension and Clinical Pharmacology, Department of Medicine. University of Virginia, B.A.; University of Virginia School of Medicine, M.D.

Carr, Wesley A., Associate Professor, Oral Surgery. Assistant Clinical Professor, Surgery. University of Georgia, B.S.; Southern Dental College, D.D.S.

*__Carrier, Gerald O.__, Assistant Professor, Pharmacology. Belhaven College, B.S.; University of Mississippi, M.S.; University of Texas, Ph.D.

Carrington, Kenneth W., Assistant Clinical Professor, Surgery (Neurosurgery). Virginia Military Institute, A.B.; University of Pennsylvania, M.D.

Carson, Elsie, Assistant Professor (SONAT), Adult Nursing. University of Georgia, B.S.H.Ec., M.S.

Carswell, Augustin S., Assistant Clinical Professor, Surgery (Orthopedics). Georgia Teachers College, B.S.Ed.; Medical College of Georgia, M.D.

Carter, Curtis H., Dean and Professor Emeritus, School of Medicine. University of Georgia, B.S.; Medical College of Georgia, M.D.

Carter, David K., Clinical Assistant Professor, Surgery. University of Southern Mississippi, B.A.; University of Mississippi, M.D.

Carter, Jack W., Assistant Clinical Professor, Orthodontics. Bradley University, B.S.M.F.; University of Kentucky, School of Dentistry, D.M.D.

Carter, Mary Jo, Professor, Section of Infectious Diseases; Medicine. Assistant Professor, Pediatrics. Baylor University, B.S.; Bowman Gray School of Medicine, M.D.

Carter, P. Michael, Clinical Coordinator, Respiratory Therapy. University of Arizona, B.A.

Carter, Robert H., Assistant Clinical Professor, Surgery. Medical College of Georgia, M.D.

Casteen, Elaine L., Clinical Instructor, Medical Technology. Clemson University, A.D.

Catchings, Florence, Clinical Instructor, Occupational Therapy. University of Northern Colorado, B.A.; United States Army Program, Certificate in Occupational Therapy.

Catterton, William Z., Assistant Professor, Pediatrics. Medical College of Virginia, M.D.

Caves, Sammy A., Instructor, Orthodontics. Medical College of Georgia School of Dentistry, D.M.D.

Cawthon, Thomas H., Assistant Clinical Professor, Surgery (Otolaryngology). Tulane University, M.D.

Chalker, Dan K., Assistant Professor, Dermatology. University of Georgia, B.S.; Medical College of Georgia, M.D.

Chambers, R. Gerald, Assistant Clinical Professor, Psychiatry. North Georgia College, B.S.; Medical College of Georgia, M.D.

Chandler, A. Bleakley, Professor and Chairman, Pathology. Medical College of Georgia, M.D.

Chandler, John L., Clinical Professor, Surgery (Orthopedics). Alabama University, B.A.; Medical College of Georgia, M.D.

Chandary, Bashir A., Assistant Professor, Medicine. King Edward College, M.B.B.S.

Cheng, Yung-Sheng, Assistant Professor, Obstetrics and Gynecology. Medical College, National Taiwan University, M.D.

Chew, Marilyn, Instructor, Adult Nursing. Columbia University, B.S.; Medical College of Georgia, M.S.N.

Chew, William H., Jr., Professor, Medicine. Medical College of Georgia, M.D.

Christian, Joe David, Jr., Assistant Professor, Surgery (Orthopedics). University of Georgia, B.S.; Medical College of Virginia, M.D.

***Ciarlone, Alfred E.,** Associate Professor, Oral Biology and Pharmacology. University of Pittsburgh, D.D.S., Ph.D.

Clardy, Richard L., Assistant Clinical Professor, Orthodontics. University of Tennessee, College of Dentistry, D.D.S., M.S.

Clark, David, Clinical Instructor, Occupational Therapy. University of Florida, B.S.

Clark, James W., Professor, Periodontics. University of Texas Dental Branch, D.D.S.

Clark, Sarah L., Assistant Clinical Professor, Medicine and Endocrinology. Brenau College, A.B.; Western Reserve University, M.S.; Medical College of Georgia, M.D.

Clark, Thelma T., Clinical Instructor, Medical Record Administration. Medical College of Georgia, B.S.

Clarke, Dorothy, Clinical Instructor, Occupational Therapy. Milwaukee Downer College, B.S.

Clary, Thomas L., Jr., Associate Clinical Professor, Medicine. University of Georgia, B.S.; Medical College of Georgia, M.D.

Clay, Cassius M., Assistant Professor, Radiology. Massachusetts Institute of Technology, B.S., M.S.

Clayton, Georgianne, Assistant Professor, Surgery. Woman's College of Georgia, A.B.; University of Chicago, M.A.

Cleckley, Hervey M., Clinical Professor, Psychiatry. University of Georgia, B.S.; Oxford University, B.A.; Medical College of Georgia, M.D.

Close, Richard A., Assistant Clinical Professor, Surgery (Neurosurgery). Temple University, M.D.

Cohen, Marvin W., Assistant Clinical Professor, Periodontics. Temple University, D.D.S.

***Colborn, Gene L.,** Associate Professor, Anatomy. Milligan College, B.S.; Bowman Gray School of Medicine, M.S., Ph.D.

Cole, Janice, Assistant Professor, Distributive Nursing. Emory University, B.S.N., M.N.

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